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EFFICIENCY OF STEAM PUMPS.

Not every engineer has stopped to think how much steam is wasted every day in the year by the steam pump. As long as it gets the feed water into the boilers, he is well satisfied to let the matter alone. It is only when a more progressive man takes the matter up, that the question is asked, and the engineer begins to realize that there is a serious loss in that direction.

And there is a loss, or several losses, from several causes. First: Direct acting steam pumps take steam full stroke. They do not even make a pretence of working steam expansively, hence there is no advantage whatever derived from expansion. Another loss is through the excessive clearance which exists when full piston stroke is not taken by the pump. Then the steam has to fill the vacant space at the end of the piston, every time the pump takes steam, and a great number of cubic feet of steam is wasted in a day or in a week, for which no return whatever is made. It is then, an advantage to have the pump so arranged that it always makes full stroke whenever possible to do so. Sometimes there is a case when such an adjustment cannot be made. This is the case when a pump has to work under variable pressures. Then, it has to be so arranged that there will be no shock at the end of the stroke at high pressure, which makes necessary a degree of compression which is not needed when the pump is working under a lower pressure, hence the loss of a considerable portion of steam from this cause alone.

It is then essential that the pump be adjusted as far as possible for the particular kind of work it is to do. Arrange the cushion so as to make the pump run smooth under the work it has to do, and then let it alone until some other change is necessary. See that the pump, especially if it is a duplex pump, takes a stroke as near the full length of the cylinder as possible. Do not try to do too much in this direction, and make the piston knock out a head sometime when the pump gets away with itself a bit, but arrange the thing as near as possible to what good common sense dictates, as is possible. This is all there is to the arrangement of any pump or engine—set them up with "brains" and run them with more brains, and the machine will last a long time and do good work all the time.—Tradesman.

CANADA AND THE ALIEN LABOR LAW.

The Premier of Canada is directing public attention to the alien labor law of the United States. This act provides in effect that an employer may not bring or send workmen to the States under a contract of work and wages. A foreign contemporary thus sums up the case from a marine standpoint as follows: If the boiler of a ship belonging to Toronto needs repairs on the other side of Lake Erie the Canadian owner or builder may not, to save time, take workmen over to the American side to do the work. He must skirmish around and find American boiler makers. In cases where the law might be presumed to favor American workmen it can be evaded without difficulty—the foreign workmen may be imported as immigrants without a "contract of labor." But in emergency, and in its application to Canada, it is an inconvenience and a hardship. The law, like the duty upon corn and cabbages, is a sham and a snare intended to deceive American workmen and capture their votes. Against Canada it is a hardship which benefits no one. Mr. Laurier, the Canadian Premier, replying to some comments in the House of Commons on the 9th inst., described the act as "a blot on the American statute-book, and not worthy of a civilized nation." The government, he added, "would endeavor to secure the withdrawal of the measure so far as it concerned

Canadians, but if it was not successful in this, while deploring any act of retaliation, it would be forced in self-defence to enact a similar law in Canada.

ANOTHER PROPELLING POWER.

A new method of marine propulsion is to be tested by a U. S. naval board. The system is the invention of Mr. John A. Secor, and, for the purpose of the proposed test, a launch, 75 ft. long, is being built, which is to be fitted with the new arrangement. According to reports, the propulsion of the vessel is to be effected by an apparatus for exploding a mixture of gas and air, as is done in an ordinary gas engine, the explosive force being brought in direct contact with the water at the stern of the boat, without the intervention of any piston, screw propeller, or other appliances. Whether the gas to be used is to be generated on board from oil, coal, or other sources, or whether, for the purpose of the experiment, it is to be carried in receivers under pressure, has not transpired.

THE STRENGTH OF WELDS IN WROUGHT IRON

Although it is generally acknowledged that a weld properly made, renders that part of a bar stronger than the rest, the experiments conducted at the engineering laboratory of the University of Michigan to ascertain the strength of welded joints are none the less interesting. The first set of specimens tested resulted in all the welds remaining intact, but as it was found that some of these test pieces were slightly larger in the weld than the bars themselves, a second set was prepared and the welded part reduced, by being machined, so as to ensure a uniform section throughout the test piece. Three bars were taken at random of 1 1/4 in., 1 in., and 3/4 in. diameter respectively, and from each bar four specimens were prepared, in order to test the various types of weld, namely, solid, lap-weld, butt-weld, and split-weld. Under test only two specimens broke at or near the weld, both of which were lap-welded, the fracture showing in one case a crystalline appearance and in the other a fibrous, whilst the strength in neither case differed much from that of the unwelded parts.

HOW FAST DOES ELECTRICITY TRAVEL?

The above question is frequently asked in every day conversations, but is seldom answered to the satisfaction of the querist. Wheatstone says that the speed of electricity from point to point along a proper conductor is practically instantaneous. Various attempts have been made to ascertain the exact number of miles which the current will travel in a given length of time. According to the most reliable estimates such experiments have made its speed not less than 114,000 miles per second.

TORPEDO BOAT LAUNCHED.

The first of the three torpedo boats which have for several months been under construction at the Columbian Iron Works, Baltimore, Md., for the United States Navy was successfully launched on Thursday last. The new boat will be known as Torpedo Boat No. 3, pending a decision as to the advisability of naming vessels after men, as in the case of the Cushing and Ericsson.

No. 3 when completed will cost about \$100,000. She is of the turtleback model, and will be heavily armored. She is 160 feet in length on the water line, and will have a beam at load water line of 16 feet, and a displacement of 138 tons. She is constructed entirely of steel, galvanized below the water line. Fireproof woodwork will be used in the engine and boiler rooms. The use of this wood is an innovation in naval construction.

NEWLY REGISTERED VESSELS.

From the regular weekly statement issued by the Bureau of Navigation, Treasury Department, Washington, D. C., it is learned that signal letters and official numbers were issued during the week ending September 26, 1896, to 11 sail craft, having a total net tonnage of 4,789. In this list is the schooner Sir Isaac Lothian Bell, 3,519 net tons, built by F. W. Wheeler & Co., West Bay City, Mich., and hailing from Duluth, Minn., one of the late Rockefeller contracts. If we omit the tonnage of the Bell, it is seen that only 1,630 tons can be credited to the rest of the country, or ten sail vessels having a mean net tonnage of 163 tons each, so that the one vessel turned out from the West Bay City yards has double the entire tonnage produced elsewhere in the United States.

In the case of steamers, much the same result is shown, for, out of 8 vessels having a total net tonnage of 4,391, the George Stephenson, built for the same owners as the Bell, and at West Bay City, carries a net tonnage of 3,503, or a gross tonnage of 4,564; thus leaving the other seven steamers given official numbers with an aggregate tonnage of 888, or a mean of 127 tons each, as compared with the 3,503 tons of the Stephenson.

In unrigged vessels, all of which are canal boats, hailing from New York, except one, we find a list of 22, with an average net tonnage of about 175 tons. It is perhaps remarkable that none of these canallers appear to have been assigned official numbers in the past, as they have been built for a number of years, one barge as early as 1874, and the others from 1884 up to 1895, none having been built later than last year, and all but three prior to that date. The aggregate net tonnage registered for the week, exceeds 13,000.

ALABAMA IRON CHEAPEST.

The British iron masters at last admit Alabama's claims to being able to make iron at less cost than it can be produced in their own country. At the annual meeting of the British Iron Trade Association, a paper on the Alabama iron industry was read on which the Iron and Coal Trades Review, of London, comments as follows:

"The paper read by Mr. Jeremiah Head on the iron industry of Alabama, with special reference to the prospects of the importation of Alabama pig into European markets, deals with a subject that is likely to occupy increased attention in the future. If recent reports are true, Mr. Head's paper shows, by a large number of important facts and figures, the singularly unique combinations of resources possessed by Alabama for the production of cheap iron, and he also proves conclusively that pig is being made at Birmingham, Ala., for a good deal less than it could be produced at in this country. On the other hand, the iron works are between 250 and 300 miles from the seaboard, and the future of Alabama pig iron in European markets must necessarily depend upon the range of railway and ocean freights. If these continue to fall as they have done in the past, and if the cost of producing British pig iron continues to tend upwards rather than downwards, the competition of Alabama at Glasgow, Liverpool and even at Middlesbrough, may become a much sterner reality than it has seemed to be up to the present time.

There has been launched on the Clyde during September 17 vessels, aggregating 24,000 tons. New orders have been placed for about 17,000 tons—being two steamers of 8,500 tons deadweight for Messrs. Wilson, Furness, and Leylands' Atlantic service. These three firms have recently consolidated.

NEWS AROUND THE LAKES.

BUFFALO.

SHIPMENTS AND RECEIPTS FAIRLY GOOD—GENERAL
PORT NEWS—TUG BOAT GOSSIP.

Special Correspondence to The Marine Record.

Still closer to the day when the fleet must give it up and go into winter quarters, but this port is much more than holding its own, both in receipts and shipments. Grain receipts are a trifle better than 100,000,000 bushels, which figure has never been reached at the end of September before, and the amount of flour, 5,686,000 barrels, is away ahead of last season and has been exceeded only three times. The shipment of coal, 1,574,000 tons is considerably more than the two previous seasons. The 137,000,000 feet of lumber received is less than last season, but more than in 1894. The canal has shipped 26,580,000 bushels of grain, which is 10,000,000 bushels less than two years ago, but is twice the amount of last season, not to mention the 55,750 barrels of flour, which is a new item.

The coal trade sticks to an even 50 to 60 cargoes a week, which has been about the run of the business all the season. Just now there is a demand for tonnage to side ports and the rate to Racine and Kenosha has gone up to 40 cents, though there is no expectation of anything better to the principal ports. This would indicate that small vessels have tied up pretty generally, but if they have they are somewhere besides here.

The coal traffic through the Welland, that had dropped to something like a dozen cargoes a month, has improved somewhat of late. Since the middle of August 35 cargoes, all of fair size, have come up, all but one of them from Oswego. It was expected that other Lake Ontario ports would enter this trade, but they have not been able to as yet.

The vessel men are afraid that the water is going to be low here this fall. The east wind is a neat thing for Toledo, maybe, but it raises the dickeness here, and it comes round every few days. A sudden shift of the wind from east to west one day last week raised the water about six feet.

Low water catches the vessels in the Niagara River trade, too. Several small, but rather vexatious mishaps have occurred there during the past week on account of the low state of the water. The barge Arenac and steamer Scott and consort Jupiter, lumber laden, have been ashore, and the Tuttle and Phoenix went on the bottom at the Black Rock elevator. Both were there at the same time, and when the Tuttle was ready to get away the Phoenix was tied to the dock forward and on the bottom aft, some distance out into the stream. There was nothing to do of course but for the Tuttle to let go and drift down stream. There is a good current a short distance out from the elevator and before the Tuttle could right herself up she was drifting at a fine rate of speed for the international bridge. There were several tugs down there to pull on the Phoenix and they all made chase. The capture was a combination affair and the sight a very "racy" one.

It is not easy to say whether the affair of the fuel scow can be considered a joke or not. It had been taken down the river to lighter the Phoenix. Quite a lot of fuel had been left in to save an extra transfer, and the tugman remarked that the scow's line was going to be light for towing her back up-stream, so he put his own on besides. Sure enough the line parted and then, with all the strain on the other, the timber head began to weaken. The men on the scow didn't relish a drifting match in that current and began to sing out to the tug. All the consolation they got was an order to jump into the iron fuel buckets. As it is very doubtful whether these buckets would float with their own weight the captain's remark is open to the charge of sarcasm. But the scow came up all right after all.

Capt. Mike Lynch was beaten out of a piloting job on the Cleveland steel canal-boat tow that went up the lake last week. There was a sudden change of plans by which the tug that was to come down and help the canal steamer was left behind, and the steamer did her own towing alone. It is understood that there are to be regular pilots for those tows next season. They will go up and come down from Cleveland and then go on down the canal till they meet the up-bound tow. This is a sort of bobtail trip that comes in like that of a trolley car that is on the wrong side of a break in the tracks.

There was the usual amount of pretended complaint during the storm last week because the tugs would not tow the vessels about the harbor, of course there wasn't much sea inside the breakwater, but the current in the creek was dangerous. Speaking of fetching a tow up quick Capt. Tom Doyle recalls a time he had towing the steamer William Edwards to the Tift farm in the days when Capt. Mallory was sailing her. It was suddenly discovered that the bridge was not going to swing and the steamer was stopped so suddenly that it took an eye out of the wooden image on the pilot house of the Edwards.

The return of the Union Liner Ramapo with a good record for the first trip is gratifying to all concerned. Capt. Robinson says she handles easy, has all the appearance of being a stiff, strong boat, will make at least 12½ miles an hour with a full load, and carries 4,000 tons. She brought down over 3,900 tons this trip.

The steamer Jewett was in fine luck this time down. She went into dry-dock to tighten her wheel, when it

was found that it had slid back eight inches on the shaft. A good pull backwards and she would have lost it without a doubt.

Tonawanda received 60,000,000 feet of lumber by lake last month, a total of 319,000,000 for the season, which is not so bad by any means.

The many friends of Capt. Gillespie, late of the Western Line steamer Badger State, will learn with sorrow of his death, which occurred at the Sisters' Hospital. Capt. Gillespie was an old resident of Buffalo, a good sailor and citizen and a model husband and father. He leaves a widow and one child.

Underwriters' dispatches say the steamer Katahdin struck on Tonawanda Island in going down the Niagara River Wednesday. Two frames and several plates were broken or bent and a survey will be held on her.

It will cost \$5,000 to put the steamer R. P. Ranney, which was partially burned on Monday, in good condition. The Ranney, which is owned by M. A. Bradley, of Cleveland, was in ordinary here. The low pressure cylinder of her engine is cracked through pumping water on it, and other fire damage, makes up the total.

Capt. Linn made a big record in going to Erie last Friday with the tug Cascade after the Olive Jeanette. His time was 15½ hours, a good 13 miles going and about 10 returning.

JOHN CHAMBERLIN.
BUFFALO, October 5.

CHICAGO.

SHIP-CHANDLERS PRESENT AN ENSIGN TO THE CITY—
SHIPYARD WORK—WEEKLY CHARTERS.

Special Correspondence to The Marine Record.

At Miller Brothers' shipyard the Steamer Peerless was in dock for a piece of new keel aft, two new pieces garboards, searching bottom and calking and straightening-hoe, the steamer Lackawanna had her shoe repaired and butts calked, the schooner H. Taber for some repairs to her bottom and calking, also repairs to her rudder stock and a new pintel.

At the Chicago Shipbuilding Co.'s yard the steamer Nicaragua was in dock for a new rudder pintel, and the steamer C. W. Elphicke for a new stern bearing and some calking.

At the Independent Tug Line's floating dry-dock the tugs Bues and Crawford are in dock for general repairs, the steam yacht Hubbard was in and had her shaft straightened.

The Goodrich Transportation Co. are having a Globe steam steerer placed on their new steamer Iowa. Robert Hay, of the Globe Iron Works Co., Cleveland, is here this week superintending the fitting up of the machine. The steam steerer is one the Globe Iron Works Co. had on exhibition at the World's Fair it is highly finished and will add greatly to the appearance of the Iowa's pilot house.

The schooner George J. Boyce, Capt. John Leonard, was stripped on her arrival here.

Capt. J. F. Smith's steamer M. M. Ross made seventy-two trips, running in the fruit trade, between South Haven and Chicago, between July 8 and October 3. She was kept hustling in all kinds of weather.

Grain freights have an upward tendency this week 1½c per bushel being offered freely on corn to Buffalo. Tonnage was scarce and shippers were willing to take vessels to arrive at the above rate. Carr & Blair chartered the steamer Victory for corn to Buffalo at 1¼c, the steamer Edward Smith No. 2 for corn to Port Huron at 1¼c, the schooner Lake Forest for clipped oats to Sarnia at 1½c, the steamer Edward Smith No. 2 for lumber from Two Harbors to Chicago at \$1.87½, the steamer Lagonda for corn to Buffalo at 1¼c.

James A. Calbick & Co. chartered the steamer James H. Prentiss and schooner Halsted for corn to Midland at 1½c, the steamer W. P. Ketcham and consort George B. Owen for corn to Kingston at 2¼c, the steamer Robert Holland and barges Warmington and Sophia Minch for lumber, Ashland to Chicago.

Captain John Prindiville chartered the steamer Bulgaria for 94,000 bushels of corn to Midland at 1½c, the steamer O. T. Flint for wheat to Cleveland 1½c.

H. W. Cook & Co. chartered the steamer Aztec and consort Zapotec for corn to Prescott, out at 2½c.

A new American flag, forty feet long, was floated this week from the staff on top of the City Hall. The ensign was presented to the city by H. Cannon & Co. Mayor Swift receiving the following letter: "Hon. George B. Swift, Mayor, Chicago: We send by bearer an American flag, which we would ask you to kindly accept in behalf of our city. We feel at all times 'Old Glory' should proudly wave from the City Hall, and would say that we should be pleased to replace the same at any time, should the elements destroy it. Yours truly, H. Channon & Co.

WILLIAMS.

DETROIT.

STEAMBOAT LINES CUTTING RATES—REPAIRS TO THE
OCEANICA.

Special Correspondence to The Marine Record.

Again the Grummond management has cut the rate from Detroit to Cleveland, and the D. & C. Line has met it. So far as present appearances go, and according to Grant Grummond's statements there is no doubt but that he will carry on the fight to the finish. On the

other hand the D. & C. people are confident, the State of Michigan is not paying expenses. Mr. Grummond has placed the Swain on the Detroit-Mackinac route.

The Thompson Line steamers continue to do a large business on Lake Huron, both down and up, but their owners claim they are not making any money, on account of low rates.

The Oceanica is nearing completion in the Detroit Dry-dock. Her bows on both sides have been rebuilt, nearly from the keelson to her rail; she has also had repairs to her cabin and after rail, and recaulking.

The Detroit Boat works have done more business this year in building yawls and life-boats than for several seasons. They have several shell contracts in view, but it is yet too early to tell what the volume for next Spring's business will be.

The old steamer Victoria, for many years a ferry on the Detroit-Windsor route, is again at her dock for sheathing and overhauling preparatory to going on the route for the winter. Her repairs will amount to only about \$500.

W. A. Livingstone's suggestion that a percentage of the boats lay up is receiving support in the present rising condition of the freight market. Some men here are confident that if only boats hold off long enough, they can get a fair paying freight for the balance of the season. Thomas Adams has laid up all but the Adams, and was on the eve of laying her up, when the rates went up; he may now continue her in service if the present rates strengthen.

Repairs on the yacht Azalea, on board which Edward Henkel of this city lost his life at Port Huron last summer, is now nearly finished. A large number of her frames were damaged, and the cost of repairs reach over \$2,000.

C. W. Norton is doing about all the chartering there is to do, which is very little. "There used to be a demand for a dozen vessels a day," said Mr. Norton, "now if you can get two or three per week it is fair." The ex-Board of Trade man, does not look for much improvement this fall.

Diver Quinn has contracted to recover the cargo of steel rails from the schooner Sumatra, which foundered off Milwaukee. He has left with a force of divers for the wreck. The work will be done from the steamer Mary Groh, which cleared from Port Huron for Milwaukee with the outfit.

Repairs to the steamer Wawatam have been completed and she cleared for Cleveland.

The steamer City of Venice was detained Wednesday, repairing damage to her rudder, sustained on the passage down from Lake Superior.

CLEVELAND.

GENERAL PORT NEWS—DRY-DOCK WORK—THAT FLAG
INCIDENT.

Special Correspondence to The Marine Record.

Next Saturday the tug Wisconsin will be offered at marshal's sale on a claim made by the Cleveland Tug Co.

Chief of the Weather Bureau, Prof. Moore, paid a visit to the local office this week and inspected the new quarters in the Society for Savings building. The station here is to be made second to none in the service.

From present indications the local shipyards, and this of course includes other industries connected therewith, will have a very quiet time during the next few, or winter months. The only contract now placed with the Cleveland Shipbuilding Co. is for a large steel steamer to be laid down to the order of the Wilson Transit Co., but there is no haste for this vessel until about next May.

Quite a few vesselmen are agreeably surprised at the successful season made by the two "greyhounds" North West and North Land. Churning the lakes, making schedule time in all kinds of weather, argues a degree of skill, care, and watchfulness almost superhuman, that is if trouble is to be avoided, not to mention the anxiety experienced by the engineers in watching the details of a mass of machinery.

Still the merry war goes on in the slashing of passenger rates between here and Detroit. U. S. Grummond, general manager of the Grummond Line, now informs his agents that the rates hereafter will be fifty cents, including berth, between Cleveland and Detroit, and it looks as if the enterprising passenger department manager of the "people's popular price line" will find it rather galling to call this bluff, much less to go it one better. It is certain that it costs less to run the Grummond Liner than it does the City of the Straits. We might yet see that free lunch bounty offered as an inducement for persons to travel, though it is getting rather late in the season for anything but business trips.

And now the Detroit Journal boasts about "the capful of wind" which the lakes can create, and writes about "the violent storms and furious seas that are probably second to nothing in the world." Well! let's all boast, and state that we have also lake weather that beats the tropics. One thing is certain: No one sails on the lakes or goes around the moon, as the Detroit man has it, to Capes Hatteras and the Horn, or the Bays of Biscay and Bengal because they want to; it is the plenitude of that ashore which always sends them there.

When the Oceanica was raised after the collision in the Detroit River with the Chisholm it was found that the damage was very heavy, especially about the bows,

and the upper works, decks, houses, etc. It has not been decided yet which vessel, if either, or both were responsible for the collision and the final repairs, which, when completed, will foot up a very heavy sum of money. The Oceanica is expected to be out of dock the end of this week.

Harvey D. Goulder, Esq., is attending court at Utica, N. Y., on an important damage suit which began on Tuesday. He is expected back in this city towards the end of the week.

Captain D. McLeod and Capt. C. E. Benham held at survey this week on the steamer Geo. Spencer at the Ship Owners dry-dock.

The survey on the Wawatam, dry-docked in Detroit, showed about 180 feet of bottom damage on the port side, it being up six inches in some places; thirty-four plates were taken off, twelve only of which were rolled and put back.

Mr. Robert Logan, consulting engineer and surveyor for iron, steel, and wooden vessels, is in town again after an absence of several days on business at other lake ports.

If only judging from the number of vessel masters one sees around the past few days, there must be, and of course there are, a considerable number of boats hailing from here laid up at other ports.

At the rate of freights going for the past week or two there is little chance for even large modern tonnage clearing any money. Owners, managers, and brokers have been at work for some time with pencils sharpened trying to figure out returns for ordinary disbursements and now the occupation is growing not only distasteful but monotonous.

Mr. E. Platt Stratton, chief engineer surveyor and secretary of the council of the American Shipmasters' Association, (The Record of American and Foreign Shipping), is visiting the lake districts this week on the business of that well and favorably known classification society, whose principal offices are in New York.

The large new steel steamer James Watt, recently launched from the yards of the Cleveland Ship Building Co., has been turned head down the river, her three pole spars stepped, and an almost complete finish is made in her upper works so that she will be ready for chartering in a few days should business offer. Except the work done on the Watt, the yards are otherwise quiet, nothing being on the stocks at present.

Mr. Sinclair Stuart, chief engineer for the "United States Standard," a ship classification society, with main offices in New York, visited this port during the week on an inspection tour. Several of the last new steamers have been built under patents owned by Mr. Stuart.

The tow barge Mautene, 626 tons, built at Trenton, by Turner in 1873, and rebuilt nine years later, owned by Madden, of Bay City, will probably have a survey held on her in Buffalo in a few days. She got badly damaged last week on Lake Superior, and engaged steam to reach Tonawanda with her cargo of lumber. Her bill for towing and other assistance, temporary repairs, etc., is placed at \$5,000, and this, with her hull damage, is expected to make a constructive total loss of her. The insurance, I understand, amounts to nearly \$9,000, so that the surveyors' reports and average adjusters' statement may be used to fight it out with her owner.

It is now learned that the F. & P. M. Line of steamers will enter competition with the D. & C. line for freight and passengers out of this port next season. This is to be no half-hearted attempt at breaking through a monopoly but a vigorous and well-planned project to direct and secure a fair share of the patronage given so liberally in the past to the D. & C. Line. A conjunction with the Grummond interests, which has fought so fiercely with its competitors this fall, may mean a lively time for the old line next year, and it is generally known that the Grummond people are more than aching for a prolonged and well fought battle of the lines.

The schooner Ishpeming, bound from Toledo to Buffalo with wheat, reached this port wind-bound on Wednesday. She struck in coming into the harbor, damaging her rudder and quarter. The vessel was leaking and engaged steam to tow to Buffalo. It is anticipated that some of her cargo is damaged.

Considerable interest is now being taken in forming a naval reserve contingent at this port. Nearly one hundred members have already signified their willingness to be enrolled.

The steel steamer Chisholm is in the Cleveland dry-dock this week with heavy bottom damage, requiring forty-two plates to be taken off, some of which may perhaps be re-rolled, and others renewed altogether. This damage, occurring so soon after her recent serious casualty, will make the Chisholm a sore pill for the underwriters this season, for in any case, they will likely be forced to pay the piper out of the large surplus of premiums they have stowed away this season. I hear that foreign companies carry the risk, and there may be some litigation in the case.

Mr. Luther Allen, secretary and treasurer of the Globe Iron Works Co., is again at business after enjoying a tour through England, Scotland, and France. Mr. Ryerson Ritchie, of the Chamber of Commerce, was shipmates with him going East and felt like witnessing the effects of a wholesale Atlantic hurricane, made specially to order. It is said that the d—s children often have their father's luck. However this may be, Mr. Ritchie skipped East and slid back West again without turning a hair, a planing machine or a lawn mower could not

have smoothed his way half so elegantly as he experienced on the breezy and howling Atlantic. On the other hand, Mr. Allen got his bellyfull coming back, and empty too, perhaps, of dirty, hard, greasy weather, and no doubt longed for his ci-devant shipmate to share his temporary ecstatic bliss.

The article about the American Ensign and tacking yards of printed canvas on to it with the names of political candidates, their likenesses, etc., which appeared in last week's RECORD has been commented upon in several offices where I have called and among vesselmen on the outside. They say that nothing ought to be added to the flag and that it is not ignorance, but thoughtlessness and partly custom which prompts most people to adorn, or disfigure if you like, the national flag on many occasions. Americans generally are partial to a display of bunting, though it is admitted that a great mistake is being made in interfering in any way with the legalized form of the stars and stripes, one large firm going so far as to tear off the legend attached to the ensign, and to hoist it again in all its simplicity and glory.

New work at the shipyards, engine works, foundry and boiler shops of the Globe Iron Works Co. is like a number of other large industries, conspicuous for its absence just now. A general cleaning up, repair work and filling stationary orders is all that is now going on, but this state of affairs is not likely to last long after the Globe talent begin to sharpen their pencils.

The local dry-docks have been getting a fair share of work during the past week. The large facilities at the yards and docks of the Ship Owners' Dry-dock Co. have been taxed to their utmost and they have handled this week the large wooden schooner Yukon, of the Wilson Transit Line. She was dry-docked for survey, which recommended that she be calked inside and out and a general overhauling, as called for after her stranding while loaded, outside the piers at this port, the Coralia, recently turned out from the yards of the Globe Iron Works Co., one of the largest steel steamers on the lakes and the biggest vessel ever dry-docked at this port received a new propeller wheel; the Penobscot for several new plates and eight frames to repair grounding damage; the George Spencer for survey, recalking all over and new decks, after which will follow the schooner B. L. Pennington for recalking and two new spars, having been dismantled, and the Alex. Nimick for a new forefoot and sternpost. Orders at the yards of the Ship Owners' Dry-dock Co. are booked well ahead so that this extensive plant is likely to be very brisk for some time to come.

SWAIN.

MAJOR MARSHALL GIVES FAIR WARNING.

Major Marshall, Corps of Engineers, U. S. A., has issued a notice to dock and wharf owners, suggesting the possibility of some of the dilapidated docks being undermined when the government dredging is begun at Chicago on November 15.

The Major is of the opinion, and no doubt he is perfectly correct, that many of the docks were built when but 12 to 14 feet of water was available, and that when he dredges down to 15 feet, these docks or wharfs would be so weakened as to cause a landslide into the river. Therefore, Major Marshall gives timely notice to the owners of such property so that the frontage may be properly braced and strengthened, otherwise, should any dock cave in and obstruct the navigable channel the owners thereof would be liable to prosecution under the United States laws.

In this connection, there is expressed among owners of property fronting on the river, a disinclination to take any steps towards strengthening and renewing their docks, and doubt the correctness of Major Marshall's views. They state further, that the piles have been drove deep enough and that there is no danger of their being undermined, as piling in the river is seldom less than 25 feet in length and being out of water only from four to six feet, they have a good hold at the bottom.

There is only one way, however, to look at the matter, and that is, to accept the notice sent out by the officers in charge of the river and harbor district, and take such steps as will prevent any undue interference with the work of dredging and deepening the river.

MILLS DRY-DOCK CO.'S OFFICERS.

The Mills Dry Dock Company, of Buffalo, has elected the following officers for the ensuing year; President, Moses C. Mills, treasurer and manager, Hamilton Mills; secretary, Thomas M. Walsh.

We are just in receipt of first copies of a new Hydrographic Office chart of the St. Mary's River, covering the distance between Shifting Point, at the head of Little Mud Lake, and the Turning Buoy, in Mud Lake proper, with a part of the Winter Point Range. The price of this chart is only 25c, although made from the latest surveys. For sale at MARINE RECORD offices, Fourth Floor, Western Reserve Building.

WEEKLY FREIGHT REPORT.

The slight rise noticeable in the Chicago grain rates last week, developed during the past few days into a brisk demand for tonnage at $\frac{1}{8}$ c increase and a strong stand being made for a rate of $1\frac{1}{2}$ c. However, the latter figure could not be obtained and everything in sight was engaged at $1\frac{1}{2}$ c to Lake Erie, the same figure being offered for early arrivals, and the demand for tonnage is expected to continue during the month. A difference of an eighth of a cent is trying to be established as between the Calumet and Chicago, the larger craft loading at South Chicago. Duluth offered $1\frac{1}{8}$ c on wheat, with some inquiry for Fort William tonnage. This rate is as good as 74c ore. Ore rates are slightly firmer for Marquette and Escanaba charters as no vessels would take last week's quotations, former port 50c and latter 45c, but there is little movement in ore for outside charters. Buffalo has nearly thrown up the sponge in coal charters, and cargoes are like hen's teeth, vessels having to wait a few days to scare up enough for ballast trim. Chicago or Duluth, 20c; Toledo, 20c. The Cleveland market shows a better demand for Lake Michigan coal, but no improvement as yet in freights to the leading ports. Lorain to Duluth has been loaded at 20c.

On the whole, a firmer freight market now exists than has been felt for several weeks, and this may induce some owners to keep their vessels in commission, instead of laying up as was talked of so much a few weeks ago. A large number of the largest and best class of vessels would have been kept going anyway as there is still a number of season charters to be filled in.

THE NEW AMERICAN "SOO" LOCK.

The Poe lock is at work again, after being closed several days for repairs to operating machinery. The machinery has all been repacked and Gen. Supt. Wheeler is of the opinion that it will work all right in future. Ever since the opening of the lock in August, the machinery has worked rather unsatisfactory. Gen. Supt. Wheeler says this was owing to the machinery being new and the inadequate power of the machines was due to the wearing out of the packing. Lieut. J. G. Cavanaugh, of Detroit, was on the spot most of the time looking after the repairs to the machinery.

This feature of the new lock has come under the criticism of vessel masters. Capt. Niland, of the Northern Wave, is quoted as saying that though he would rather go through the new lock, he could save time by getting into the Canadian canal, or the old American one. "It takes so long to get in and out of the new one," said he. "There doesn't seem to be enough power in the engines to swing the gates properly and it takes forever to empty and fill. If I had taken the Canadian lock I would have saved a half day on the last trip up."

Buffalo captains are also commenting upon the difficulties of navigation at Sailors' Encampment. The water is getting low and one of the liners came through that treacherous spot recently, drawing 14 feet six inches, with a depth of but 14 feet seven inches in the channel. This is steaming pretty close to bottom.

ON OUR WESTERN BORDERS.

Harbormaster Hoffin makes the following report of the ocean commerce at the port of Tacoma for the month of September, 1896:

IMPORTS.

Cargoes of N. P. steamers Evandale and Olympia from China and Japan, value... \$ 350,855.40
Previously reported..... 2,522,599.74

Total imports, nine months..... \$2,873,455.14

EXPORTS.

Merchandise to China and Japan..... \$ 257,052.00
Merchandise to British Columbia..... 46,281.80
33,732 tons coal to San Francisco..... 101,196.00
4,994,129 feet lumber to Australia..... 41,655.00
1,133,183 feet lumber to Africa and China..... 9,780.00
1,470,000 feet lumber to Central America..... 13,153.00
1,350,000 feet lumber to San Francisco..... 10,880.00

Total..... \$ 479,997.80
Previously reported..... 4,251,395.97

Total exports, nine months..... \$4,731,393.77
Same period last year..... 3,239,961.03

Gain over last year..... \$1,491,432.74
Inward registered tonnage 49,926; outward registered tonnage 43,031. Inward cargo tonnage 5,515; outward cargo tonnage 57,592. Deep sea arrivals 50; departures 29.

DIPPING THE ENSIGN—SALUTING.

Under the caption of "A Question of Etiquette," one of our foreign exchanges has the following:

SIR.—The question I wish to ask is how and when to dip one's ensign? Most sailors think they know all about it; I confess I don't, and I also venture to say there are a great many captains and officers in the merchant service like myself. I have been nearly twenty years at sea, and I have known, since I came into steam, many different captains, all of whom seem to have different ideas on the subject. For instance, one wants the flag hauled down smart and hoisted up slow; another just the reverse. One wants to dip before he gets to the ship (supposing she is passing or at anchor); the other says, "No, dip when she is abeam." One wants to dip to every man-of-war, supposing there are ten or a dozen at anchor; the other says, "No, dip once and pass them all with your ensign down, and the same when they are under way."

I am sure there must be some fixed rule which I have never seen. If you know of any fixed rules that treat of this very simple matter, I think you would be conferring a great favor on hundreds of people connected with the sea if you would state them. Yours truly,

Hamburg, Sept. 9.

SECOND OFFICER.

As far as we are aware there is no fixed and universally recognized rule. It is like many of the points of etiquette in ordinary life; the most natural way of doing it is the best. The more smartly the salute is made the better, and care should be taken to keep a tight luff. The following quotation from Captain Wilson Barker's forthcoming work on "Elementary Seamanship," with which the author has favored us, may be useful to our correspondent and his friends.

"Dipping the ensign, as the operation is called whereby one ship salutes another, is carried out by the ensign being slowly hauled down the staff, or from the peak, about half way, and then, after a slight pause, hoisting it again slowly, taking care at the same time that the halliards are kept tight.

"It is difficult to lay down any hard and fast rules for the guidance of officers, but it may be generally considered that—

"(1) A junior dips first to a senior.

"(2) That a merchant ship dips to a man-of-war. (In the case of a squadron to the flagship.)

"(3) That the flag should be dipped when the ships are abreast, the vessel taking the initiative making a slightly longer pause, to give the other vessel a chance of answering.

"It is customary now to make only one dip."—We think that there are but few men who will not coincide with Capt. Barker's views of nautical etiquette as expressed in the foregoing method of exchanging salutes, and it is a useful code to cut out and as Capt. Cuttle would say: "Make a note of."

DUTY ON DAMAGED GRAIN.

An interesting point has been raised this week relative to paying duty on damaged grain. The question arises in this instance in connection with the Canadian steamer Shickluna and consort St. Louis stranded grain laden near East Tawas. The grain is all badly damaged, but it is Canadian grain and would have to pay full duty if landed at a United States port, while if landed in Canada it could hardly be given away. The cargoes are insured so it is "little gilt off the gingerbread" for the underwriters' and they don't half like it either.

According to a ruling of the Treasury Department there is no rebate of duty on damaged grain and the Dominion law is the same. There is a case still pending for Welland canal tolls on 25,000 bushels of wet wheat that was brought back through the canal from Kingston as part cargo of the Montague, so that the inequitable ruling cuts both ways. When a wet cargo of bonded wheat had to be thrown overboard because it would not sell for the amount the duty came to, proves that some revision of the law is required to obviate such a sacrifice, of damaged grain. The Lake Carriers' Association underwriters and Canadian shipowners if they got together might change this strange ruling.

A SAIL OF HOLES.

Those who have been brought up in the knowledge that the more like a board any sail was set the better it would draw, will find it hard to believe that the speed of a sailing vessel can be increased by boring holes in her sails; but an Italian sea-captain claims to have conducted experiments which go a long way towards proving it. His theory is that the force of the wind cannot fairly take effect on an inflated sail, because of the cushion of immovable air which fills up the hollow. To prevent

the formation of this cushion, the captain bored a number of holes in the sail. Holes let through the air which would otherwise have been retained in the hollow of the sail, and allowed the wind to exercise its whole power by striking fairly against the sail itself. Several trials of this device have been made, and it has been found that in a light wind a boat with ordinary sails made four knots, while with the perforated sails she covered five and a quarter knots. In a fresh breeze she made seven knots with the ordinary, and eight and three-quarter knots with the perforated sails; and in a strong wind, she made eight knots with the old and ten knots with the new sails.

LAKE SUPERIOR ANTHRACITE.

H. W. Pearson, of Duluth, Minn., who has made a study of geology and has some decidedly new theories in that field, is out on a prospecting tour, presumably in the interest of President James J. Hill, of the Great Northern Road, and is in search of coal. The Buffalo correspondent of the Black Diamond says that he is working in Montana, near the Canadian boundary, in what is known as the Crows' Nest pass county. There is a rumor that he has discovered the existence of a coal-bed there, believed to be the southern end of a vein extending down from British Columbia. The report has it that he has found a fine bed of anthracite, but there is little confirmation for any of the reports. Mr. Pearson is to be away several months.

TO DESTROY OCEAN DERELICTS.

Much interest is still felt in the proposed international association of hydrographers to prepare and disseminate data regarding dangerous derelicts at sea, and take steps looking to their pursuit and removal. A member of the British House of Commons, proposes to introduce a bill at the next session of that body to authorize the Admiralty and the British Board of Trade to construct or charter vessels equipped with appliances to search for and destroy derelicts which are a menace to navigation. There are some obsolete cruisers in the British navy which might well be utilized in this very important work and it is hoped that the bill will receive the support it deserves. At the present time Lloyds is doing great service in publishing full and early reports which they receive of all floating wreckage, and the Hydrographic Office, U. S. N., at Washington is engaged in similar work of a most thorough and exhaustive character.

UNITED STATES MERCANTILE MARINE.

The merchant marine of the United States on June 30, 1896, according to the completed tabulation of the bureau of navigation, comprised 22,908 vessels of 4,703,880 gross tons, a decrease of 330 vessels, but an increase of 68,000 tons over the previous year. Wooden sailing vessels numbered 16,244 of 2,310,819 gross tons. Iron and steel steamers numbered 880, of 1,004,113 gross tons. Vessels documented at the Atlantic and gulf ports numbered 16,786 of 2,667,313 gross tons; at Pacific coast ports, 1,560 of 437,972 tons; on the great lakes 2,333 of 1,324,068 tons, and on the western rivers, 1,229 vessels of 274,527 tons. Vessels registered for the foreign trade numbered 1,257 of 844,954 tons, of which 244 are steamers. Vessels built and documented during the year number 723 of 227,096 gross tons, or more than double the construction of the previous year. On the great lakes 117 vessels of 107,782 tons were built.

LAUNCH OF AN ELECTRIC YACHT.

The electric yacht built to the order of Mr. John Jacob Astor, was successfully launched at Upper Nyack, N. Y. The craft was christened Utopian, by Miss Elizabeth M. Jewett.

The Utopian is said to be the largest electric yacht in the world. She is 72 feet long over all, 12 feet beam, and has a draft of 3 feet 6 inches. Electric power from 480 cells of storage battery will propel the boat at a calculated speed of 16 miles an hour. The twin-screws will be driven by 25 horse-power electric motors. Among other electric features will be a powerful searchlight. The batteries will be charged at Mr. Astor's electric light plant at Rhinecliff, and will be capable of maintaining a continuous run of twelve hours.

The yacht is fitted throughout with electric lights, electric bells, etc., and electricity is utilized in every way possible to promote comfort, efficiency and convenience.

FLOTSAM, JETSAM AND LAGAN.

Chicago lake shipments for last week were 91,712 tons; by rail east 63,994 tons.

The Canadian steamer Shickluna, which went ashore at Fish Point was floated on Monday, after jettisoning cargo.

The small steamer Pilot has cleared from Holland, Mich., for New Orleans, via Chicago, Illinois canal, and the Mississippi.

The Canadians have conquered their scruples and for the remainder of the season will keep the Welland canal open on Sundays.

The Iroquois broke a steam-pipe off Keweenaw Point on Sunday last and was towed to Two Harbors, by the Maritana, and from there by tug to Duluth.

Like other tonnage the whalebacks have also to tie up these times. The consorts of the Bartlett, Colgate and Thomson have gone into winter quarters at Duluth.

The steamer Curry, bound down, parted her wheel-chains and went aground at Grosse Isle, just inside Ballard's Reef light-ship, on Tuesday. She was released shortly after grounding by the Saginaw.

Lumber rates are expected to reach \$2 from the head of Lake Superior this week, \$1.87 having been paid last week. The advance will stiffen rates from Lake Huron, Georgian Bay and points east of Keweenaw Point on Lake Superior.

Sir Edward Reed, formerly chief constructor of the British navy, is now inspecting American shipyards, and speaks very highly of our productions and facilities. Guess he could not do less with any regard for the truth.

The officials of the Pittsburg & Lake Angeline mine did not accept the proposal of their employes to work ninety days on the due bill system, consequently the mine was shut down Saturday last and the pumps will be stopped as soon as the tools are removed.

The Supreme Court has granted an order in the motion for the appointment of a receiver for the Ogdensburg & Lake Champlain railroad, as an insolvent corporation. This action will not affect the business of the fine line of steamers running to Ogdensburg.

The gas buoy showing a red flash which was adrift on Lake Erie, has been picked up at Rondeau, and placed on the end of the southeast shoal, off Point Pelee light. The black buoy is on the northeast point of the middle ground in Pelee passage. Both are flash lights, but the intervals between the flashes are not regular.

An Indiana man tried to revenge himself for being turned down by his best girl, by eating three bars of soap, and trying to drown himself. He was quickly washed ashore.—World. We can see the Cleveland World once and go it some better. From carefully compiled government statistics including Salvation Army records, it is computed, that upwards of seventy-five million people were washed ashore in the United States in 1895.

A correspondent asking about the now famous Bazin roller-steamer built in France, to roll across the English channel, says: "I am curious to know, what would happen supposing one of her tyres got punctured. Would it not be rather unpleasant, to put it mildly, for those on board?"—Putting it mildly would do no good, it would then be a case of giving it to her, boots and all, as she would have to reach port on a circular course, just as they make century runs, thus lessening the distance as the right peddle peddled, keeping all hands prying with capstan bars on the lee scuppers to prevent further efflux of inflation.

Commander C. D. Sigsbee, U. S. N., Hydrographer, Washington, D. C., has compiled and published on the back of the North Pacific Pilot Chart for October, a valuable epitome of navigation. After a most interesting yet concise introduction, the commander furnishes an easy and simple rule for finding the name of an observed star; also a graphical solution of the problem, for those whose early education has been neglected in this respect. Rules and solutions are also given for finding the time a celestial body crosses the prime vertical, and its corresponding altitude, to find the true bearing or azimuth of a celestial body, as well as general remarks and graphical solutions of direct and composite great circle sailing. We now wonder why in the name of heavens we can't write "heavenly bodies" in the commander's terms. The word celestial, crops up, although the chart, with so much heavenly on it is before us, but somehow we don't seem able to take it aboard. Suppose it's neglect of early training.

CORRESPONDENCE.

We do not hold ourselves responsible in any way for the views or opinions expressed by our correspondents. It is our desire that all sides of any question affecting the interests or welfare of the lake marine should be fairly represented in THE MARINE RECORD.

MORE SCHOONER HISTORY.

To the Editor of The Marine Record:

ASHTABULA, Oct. 5, 1896.

In the last issue of THE MARINE RECORD, I notice an article under the heading of "Flotsam and Jetsam" which is not correct in its details. The dimensions of the schooner John Schuette is 140 feet over all, 26 feet beam and 11 feet depth of hold, registered tonnage 317, burthen about 500 tons, owned by Jasper Hanson, Manitowoc, Wis.

The Schuette loaded deals at Green Bay, Wis., in the spring of 1876 for Gloucester, Eng., and her freight amounted to \$5,000. She returned to Wilmington, N. C., and loaded naval stores for Hamburg, getting a freight of \$4,470, returning to Wilmington with a cargo of phosphate at \$2.50 per ton. She then done a little in the coasting trade and loaded naval stores for London. On this passage she experienced a hurricane and met with some damage to her rudder which compelled her to put into Fayal, and after laying for 20 days there, she reached London Dec. 24, 1877. Returning to Wilmington, Mr. G. D. Harris, of Milwaukee, holding a claim against the schooner for her first outfit, purchased the vessel for about \$8,000. She next loaded naval stores for Riga, in the Baltic Sea, and from there took a cargo of deals to Portsmouth, Eng. She then entered the collier trade, having a freight of \$2.25 (or nine shillings sterling) per ton. The following spring she was chartered in Cardiff for coals to Havana, Cuba, and from there with sugar to Montreal, loading salt at the latter port for Chicago, arriving on Lake Michigan September, 1879. The vessel was never run away with, but the owner's son was somewhat of a spendthrift, and, being supercargo, took his own fling with the funds and freights.

NAVIGATOR OF THE JOHN SCHUETTE.

A THIRSTY OLD STORY.

The municipal and marine talent of Buffalo, or that portion of it that is enrolled in the Mayor's Harbor Advisory Committee, inspected the harbor and lake front this week, with a view to making much needed improvements. Mr. C. H. Keep, counsel for the Lake Carriers' association, is a statistician from the ground up, and when called upon he stated to the committee that Buffalo was the fourth maritime port of the world, the freight tonnage of London, Liverpool and New York, only exceeding that of the "Queen City." But the Courier scribe takes the cake in detailing a yarn told by Capt. J. J. H. Brown. It appears that the weather was overcast and cloudy, so, after the party got back to terra firma, one of the committee opened—not a keg of nails, but one of the kind of pocket stoves that fit in a Kentucky deacon's Sunday coat-tail. While this was going on, Capt. Brown told one of the best stories that the members of the committee, or most of them, at least, had heard in weeks. "There was a shipwreck, and a sailor was cast upon a cannibal island," said the captain. "The cannibals gathered round and debated how the victim should be cooked. Finally one of them said: 'If this thing goes on much longer the man will starve to death and he won't be fit to eat. I move that we tap him and drink his blood before he gets any thinner.'"

"Whereupon the unfortunate, shipwrecked individual entered a protest. He said: 'Gentlemen, if it is the custom of your country to cook and eat every stranger that is brought to your shores by shipwreck, I do not see that I can raise an objection, but in the name of common fairness I do object to being stuck for the drinks of this crowd.'"

STEAM PIPE AND BOILER COVERINGS.

Various non-conducting coverings for boilers and steam pipes have recently been subjected to a series of tests under a new method, by Prof. Norton, of the Massachusetts Institute of Technology. The coverings experimented upon were placed on pipes which were afterwards filled with oil, the oil being heated by means of a wire immersed in it through which an electric current was passed. Prof. Norton draws attention to the dan-

gers attending the use of slag wool, the mere handling of it being dangerous to the person. Very injurious effects are produced by the fine needle-like fibres getting under the nails, whilst the dust, when inhaled, has been known to produce hemorrhage. As a non-conductor of heat, it only acts efficiently when the fibres are loose and fluffy, in which condition the air held amongst the wool entraps the heat and prevents its radiation, when the fibres form into a compact mass.

NAVAL ENGINEER'S JOURNAL.

The quarterly number of the Journal of the American Society of Naval Engineers for August has an article on "The Contract Trial of the United States Battleship Oregon," four articles on "Marine Boilers," an article on "The Development in Design and Construction of German Men-of-war," an article on "Comparison of New British Cruisers, with those Building at Barrow," and an article on "The Use of Electricity on Board Ships," and notes on a variety of subjects. The volume contains numerous mechanical drawings, giving the details of ship construction in its relation to motive power.

A DESERVED HONOR.

The degree of Doctor of Engineering has been conferred by the faculty and trustees of Stevens Institute of Technology, Hoboken, N. J., upon Commodore George W. Melville, engineer-in-chief of the United States navy, in appreciation of the excellent engineering work performed by Commodore Melville for his country and the advancement of the science of steam engineering, well illustrated in the world-wide famed "White Squadron."

Only once before in the twenty-five years' history of the Stevens Institute has the degree of Doctor of Engineering been conferred, and then upon Prof. R. H. Thurston, of Rhode Island, who formerly occupied the chair of mechanical engineering in Stevens Institute, and is now director of Sibley college, Cornell University.

NOTICE TO MARINERS.

OFFICE OF THE LIGHT-HOUSE INSPECTOR,
CHICAGO, Oct. 5, 1896.

Notice is hereby given that the wreck of the schooner tow barge Sumatra in Milwaukee Bay, Wis., lies in five fathoms of water five-eighth miles E. by S. one-half S. from Milwaukee pierhead light.

To avoid the wreck at night in approaching from the Sound, keep one mile off shore from the pierhead light until it bears W.

Notice is hereby given that the Waugoshance Sixteen Foot Shoal second-class nun buoy, reported out of position September 25th, was replaced October 3rd, 1896.

Respectfully,

COMMANDER J. H. DAYTON, U. S. N.,

Inspector Ninth Light House District.

CHANGE IN DOUBLE TOP ROCK LIGHT.

The fixed light shown from Double Top Rock light-house, Western Islands Group, Georgian Bay, will be replaced on the 12th of October next by a more powerful light, as mentioned in Notice to Mariners No. 57 of 1895. Lat. N. 45° 2' 4" Long. W. 80° 21' 31". The light will show a fixed bright light varied by bright flashes at intervals of 30 seconds. The illuminating apparatus is dioptric and of the fourth order and the light should be visible in clear weather 14 miles.

LIGHT ON HILTON WHARF.

An arrangement has been made by the government of Canada with Mr. S. T. Bowker, owner of the wharf at Hilton, on the north coast of St. Joseph Island, in St. Joseph Channel, District of Algoma, Ontario, by which he will maintain, for the purpose of navigation, a light upon the wharf. Lat. N. 46° 15' 35" Long. W. 83° 53' 20". The light is a fixed white light shown from a square lantern with glass reflector, suspended from a pole 60 feet back from the outer end of the wharf. It is elevated 25 feet above the level of the water and should be visible three miles from the approaches to the wharf. A mechanical fog horn, to be worked by hand, has also been supplied, and will be used in answer to signals from vessels.

HAND FOG HORN ESTABLISHED AT BAMFORD ISLAND LIGHT.

A mechanical fog horn to be worked by hand has been supplied to the light station at Bamford Island, St. Joseph Channel, and will be used to answer signals made by vessels.

F. GOURDEAU,

Deputy Minister of Marine and Fisheries.

Department of Marine and Fisheries, Ottawa, Canada.

CANAL TRAFFIC.

REPORT OF FREIGHT AND PASSENGER TRAFFIC TO AND FROM LAKE SUPERIOR FOR THE MONTH OF SEPTEMBER, 1896, INCLUDING STATISTICS OF THE UNITED STATES AND CANADIAN CANALS AT SAULT STE. MARIE, MICHIGAN AND ONTARIO:

EAST BOUND.

ITEMS.	U. S. Canal.	Canadian Canal.	Total.
Copper, net tons.....	15,722	1,039	16,761
Grain, bushels.....	2,733,185	385,035	3,118,220
Building stone, net tons.....	3,606		3,606
Flour, barrels.....	1,076,841	181,620	1,258,461
Iron ore, net tons.....	756,790	228,875	985,665
Iron, pig, net tons.....	342	1,100	1,442
Lumber, M. ft. B. M.....	84,858	6,690	91,548
Silver ore, net tons.....	100		100
Wheat, bushels.....	7,412,945	2,407,695	9,820,640
Unclassified freight, net tons.....	12,521	3,472	15,993
Passengers, number.....	1,390	603	1,993

WEST BOUND.

ITEMS.	U. S. Canal.	Canadian Canal.	Total.
Coal [hard], net tons.....	51,527	21,167	72,694
Coal [soft], net tons.....	217,308	101,361	318,669
Flour, barrels.....	75		75
Grain, bushels.....	1,100		1,101
Manufactured iron, net tons.....	12,090	8	12,098
Salt, barrels.....	41,326		41,326
Unclassified freight, net tons.....	30,888	8,834	39,722
Passengers, number.....	1,448	415	1,863

East bound freight, net tons..... 1,667,210
West bound freight, net tons..... 447,272

Total freight, net tons..... 2,114,482
Total craft, United States..... 1,628
Total craft, Canadian..... 597

Total..... 2,225
Total registered tonnage, United States..... 1,728,188
Total registered tonnage, Canadian..... 438,489

Total..... 2,166,677

TRADE NOTES.

Some time ago the Russian government contracted with the Carnegie works for a quantity of armor for one of its war vessels and stipulated that its inspector should have full access to the works during its manufacture. Now it is said that the inspector has possessed himself of the secret of armor manufacture and he will use it for the benefit of his government in Russian workshops.

We are in receipt of a copy of the Almy Water Tube Boiler Co.'s catalogue, which contains some fine illustrations of boilers that have been placed in several steam yachts, among them two boilers for the Free Lance, three for the Anita, and also a list of steam vessels of all classes throughout the United States that these boilers have been placed in. Since issuing their present catalogue this company, the works of which are at 178 to 184 Allen's avenue, Providence, R. I., has increased its plant and have greatly improved facilities.

The Foster Engineering Company, of Newark, N. J., manufacturers of the standard pressure regulator and reducing valve of the United States Navy, report that their factory has been taxed beyond its limit during September, on work for the government, the Cramps, and other large shipbuilders. Among the orders received are two 8 inch, two 7-inch, three 6-inch, two 5-inch six 4-inch, fifteen 2½-inch and 3-inch, and many other valves of smaller sizes. Most of these are made of government composition metal and intended for government cruisers and battleships, ocean and lake steamers, and ferry-boat service.

The improvement in marine steam engines and boilers is well shown by the following statement in the Liverpool Journal of Commerce: "Twenty-four years ago a firm of shipowners had a steamer built to carry 3,200 tons deadweight. They have had one built this year to carry 8,000 tons; and the coal consumption of the two vessels at the same speed is practically identical, though the latter vessel is 100 feet longer than the older one, but the fall in the rate of freights has been more rapid still."

Mr. F. H. J. Porter, general western sales agent of the Bethlehem Iron Company, read an interesting paper on steel forgings before the Western Society of Engineers, at their regular monthly meeting held on the evening of Wednesday, Oct. 7th, in the auditorium of Armour Institute, Chicago. This paper was illustrated by lantern slides descriptive of modern methods of making miscellaneous forgings, armor plate, guns, etc., and explained the merits of fluid compressed steel and of hollow forged shafts and similar forgings.



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CLEVELAND, O., OCTOBER 8, 1896.

HERE AND THERE.

We had something to say last week about the worse than nonsensical display which our national emblem was now being used for, and the consequent ignominy that was being thoughtlessly heaped upon the American Ensign when it was altered and disfigured and in that condition thrown flaunting to the breeze as a campaign banner for political purposes. Let us call to mind the story of "the man without a country," and imagine if after all the trials and vicissitudes he had passed through when outlawed, and his inordinate desire to be admitted again to the nationality and have a belong to—is it rational to suppose that he would sanction the desecration by disfigurement of his former national emblem, under whose protective folds he longed to return, rather, as the highest mark of his revived allegiance and patriotism and the greatest honor which could be bestowed upon him when his soul had taken flight, did he humbly request that his remains might be enfolded in the nation's flag which he had so reviled in the days of his ignorance and folly, and this is the proper sentiment for those who love their country to indulge in. To inculcate a patriotic regard for the national emblem do we have it floating from our school-houses, and for similar reasons wherever it is legitimately hoisted. A ship on hoisting a supposed national flag at sea, but which showed that unwarranted liberties had been taken either by adding to or taking from its distinguishing features, would be in immediate danger of being challenged to surrender, with the alternative of being fired into and sunk by any man-of-war or naval vessel that fell in with her, irrespective of nationality, and such would be her just deserts for daring to flaunt a piratical abortion of the emblem of any nation. Such being the case, how much more than particular should we be in the proper display at all times and places of our national bunting, and in such a manner, too, that every citizen might revere and hold sacred in all its honor and exact purity of national formation the glorious old stars and stripes, signifying as it does, the union of the States of this mighty Republic, and under which the dead and gone, though brave old Commodore Perry could "never give up the ship" on Lake Erie. Flags, pennants, banners, bunting in galore for all celebrations, but no longer the American Ensign only in the place of honor, and it is good enough at that without any alteration being made at the whim or caprice of individual fanatics. The custom of exhibiting "Old Glory" on all occasions is commended, but it should not be tampered

with or disfigured. On this point we can't be too jealous or zealous, and how earnest, scholarly men who have fought, worked, and lived under its folds, and traveled under those of other nations, can permit its glory to be diminished by adding a soiled fly or tail to it or its lustre dimmed by printing on it personal photographs, is beyond the comprehension of the scribbler.

* * *

Under the title of "Our Neglected Shipping," Mr. Alex. R. Smith, the editor of Seaboard, New York, contributes an excellent article to the current issue of the North American Review. Mr. Smith is prolific with his pen, full of vim and energy. His past connection with the steamboat inspection service, and his journalistic experience as editor of Seaboard, has given him singular opportunities of becoming thoroughly versed in the theoretical methods advocated for the resuscitation and upbuilding of the United States mercantile marine.

Drawing largely from all prominent authorities who have treated on this interesting subject, Mr. Smith makes out a clear case in favor of discriminating duties as the chief or primal legislative move necessary to again float the stars and stripes in all parts of the world, completely ignoring the situation that more than one power or nation is in a position to enact self-protective and discriminating laws. Of course we all want to see a rehabilitation of the merchant marine, but no one antidote for the past and present decadence and its various causes will be found a cure-all. Furthermore, it is a great question whether favoring United States bottoms by exemption from, and levying a tax on all foreign vessels trading to and from our ports would ultimately be found the best means of increasing our carrying trade, the query presenting itself something in this way: Have we as a nation a monopoly on class protection and a footing to make us secure in entering a wedge labeled "discrimination in freight charges of the oversea tonnage of the world?"

We would have much preferred seeing the subject of "Our Neglected Shipping" handled from a modern standpoint, under conditions existing to-day, instead of recounting "early history in the misty ages of Egyptian antiquity," dwelling on the situation as experienced during the infancy of the Republic and quoting so liberally from the sometimes flowery and unmeaning utterances of politicians, diplomats and statesmen. However, the writer of the article is not a modern Moses sent at this time to deliver laws for the preservation, upbuilding and eventual supremacy of the United States carrying trade in oversea bottoms, therefore his legislative ultimatum relative to the way we should go is not perhaps quite final, although, as from the pen of the secretary of the American Mercantile Marine Society, it is a fairly good blast, too.

* * *

Foreign, chiefly British, of course, underwriters, have had a snap so far this season, and we would not be surprised to find domestic companies cutting under the Lloyds rates, besides writing more liberal policies next season, than their foreign competitors can afford to do. The season now drawing to a close has been comparatively free from casualties in wrecks, fires, collisions or foundering, the Cleveland owned steamer Chisholm being perhaps an exception, as she is back again in dry-dock, with heavy bottom damage, after just being sunk in Detroit River through collision, raised and repaired. There is another feature about lake risks, however, which make them acceptable to foreigners; and that is, the absence of dishonesty in any form. Underwriters are not called upon to pay for "wear and tear," their bills are not swelled at dry-docks, shipyards and machine shops, the average adjusters invariably find owners willing to bear their just share of the losses, and such being the case, business can be done in that spirit of honesty and integrity, too often found wanting among people accustomed to make the assurer dance to the music of the assured. There is also an absence in lake underwriting of expensive and long tow bills, or exorbitant charges for the assistance of steam under the various critical conditions which a risk may sometimes be placed in. Salvage claims, abandonments, or long and expensive searches for derelicts are almost unknown factors in lake underwriting, so that there is a corresponding immunity from the expenses so frequently incurred in the ocean and coast trade. Machinery is also well kept up on the lakes, nor are en-

gines allowed to pound themselves to pieces until finally required to be rebuilt, at a time when a suitable average case can be made. The lake shipowner is not dishonest enough to lend himself to such tricks, but foreign underwriters find their own countrymen at it very frequently in spite of the average adjuster's standing between the assurer and the assured to resist such extortions. It is early yet, or perhaps not too early either, for American underwriters to think about getting up such a policy as will commend itself to the owners of lake tonnage, in preference to placing their risks in foreign offices another season.

* * *

There is some truth in what the Hon. William McAdoo, Assistant Secretary of the Navy, said recently relative to the grounding of the Texas, only that he looked solely on the one side of the question. Mr. McAdoo asks that we consider the accidents that befall the merchant marine of this or any other country for a year at a time and note the immense destruction by wreck or by accident, and the loss of life. Seldom do the papers regard the accident as being the fault of the commanders. But when a man-of-war runs ashore, in a flash the whole country hears of it, the press censures the commanding officer and all call for instant punishment even when the writers are ignorant of the real state of matters. In considering this question it is advisable to bear in mind that frequent changes are made in the commands of vessels, and moreover, that the commanders are often obliged to enter harbors that they have never visited before and that, too, without the aid of pilots. Nevertheless, accidents to government vessels are of rare occurrence as compared with the number of mishaps to the merchant marine chronicled almost daily. Now, let the Assistant Secretary compare the number of merchant vessels in this or any other first-class maritime power with the number of naval vessels, then he can see better where he comes out, and this would show very marked results in the lake, coastwise and river trade.

* * *

It can't help but give a person a good deal of that tired feeling when he hears of a crew of United States life-savers being engaged in jettisoning a cargo of wheat from a stranded Canadian steamer whose crew are safely housed ashore and the vessel herself solidly fetched up and in no immediate danger. The above was the telegraphed report from East Tawas on Saturday anent the Shickluna and her consort stranded above Fish Point, Lake Huron. There are hundreds of men in that vicinity as there is almost everywhere else just now ready and eager for a day's work, and the life-saving crew might be in better service than taking the bread out of the mouths of these men. There has for some time been a danger of this sort of government paternal interference with the aims and business of private persons engaged in following legitimate occupations, and we would like to know if the inspector of that district permits his crews to act as salvors. Every assistance, including pumps, divers and a plentiful supply of labor is at the command of wrecking companies close to the stranded vessels and awaiting employment, therefore, when life-savers save life, or make an attempt to do so, they would about do what they are paid for under such conditions as the above.

* * *

Chicago River has received an appropriation for dredging, this presumably on account of the ship or Hennepin canal being placed under government supervision, and the river considered as a tributary channel, or navigable waterway leading thereto. If the "I Will" of Chicago desires to have the Federal government clean out its local sewers it is certain to be accomplished, but no other port on the chain of lakes could even attempt such an innovation much less carry it through successfully. Chicago can and has. Furthermore, the great city must be given all due credit and the municipality praised for its splendid and liberal improvements on the lake front; miles of frontage is being reclaimed, boulevarded and beautified, and at the present time there is more work being carried out in this direction by the municipal government of Chicago than there is at all lake ports combined. If this is the result of boodle alderman, other ports would be blessed by having a trifle of the same sort of wickedness.

We imagine the citizens of Buffalo, the "Queen City," would be struck speechless, or the reverse, if they were

to see a government dredging outfit at work clearing out their river, while the natives of Cuyahoga county where the odoriferous river of that name flows through, and the citizens of Cleveland, the "Forest City," in particular would not doubt imagine the millennium had been brought about if the bare possibility of such an event was even suggested. On the contrary, the charming "I Will" of Chicago, the "Windy City," accepts the situation gracefully, in fact, with the utmost sang froid, and simply desires that her citizens be not bothered or annoyed in any way, nor put to a cent of expense while such necessary work is being carried out. In fact, should the Federal government, while in the act of clearing out this large open sewer, injure or in any way obstruct or act detrimental to the best interests of the owners of property on the river front, "the powers that be" will be held liable for any damages arising therefrom. All must admire the unaffected, deliberate superiority which Chicago assumes over that of all other cities in the middle and western states.

Commodore George W. Melville, Engineer-in-Chief, U. S. Navy, has done and is doing more to elevate the social and professional standard of engineers in the navy than any other individual has ever attempted in the history of the country. Just as long as Commodore Melville has the ear of the Secretary of the Navy, much needed reforms in the status, pay and treatment of the engineer officers will be brought about, but when the advice of line officers predominates, the hands of the Engineer-in-Chief will, in a certain measure, be tied. The engineer in the navy, not unlike his brother of the merchant service, has too long been looked upon as belonging to the "black squad" unrepresentable at most times, and only in command of steam, the motive and propelling power ruling the ship, to be at the orders, beck and call of even the junior line officers and others which might comparatively be termed upstarts. Commodore Melville believes in giving credit, emoluments and honors where justly due, and we wish him every success in his long uphill struggle for the elevation of naval engineers, mechanics and artisans.

The assistant hydrographic officer at Chicago, Mr. W. J. Wilson, has no right whatever to conduct a free school of navigation in the government office at that port. He may have had permission from his superior in office to thus employ his time during the winter months, and perhaps for a portion of the sailing season, but this does not alter the fact that Mr. Wilson, as well as his superiors in office, are paid by the people a good salary for specific duties, and not to cut into the work which could be done by private citizens. There is talent enough in Chicago to give all the instruction necessary in lake navigation when such information is valued enough to be paid for; consequently, paid government officials should attend strictly to their own business, during business hours. This gratuitous instruction feature has been commented upon, and it should be generally adopted, giving ports equal advantages, or ceased altogether.

The furore or ripple created this week, in certain circles by a Cleveland daily paper suggesting that Mr. Rockefeller, or in other words, the Standard Oil Co., intended taking over the exclusive privilege of trading on the lakes has no foundation or but a slight one. Of course any individual, firm, or corporate body putting afloat large modern tonnage will look for something for the vessels to do during the season of navigation, and, as it happens, the Bessemer fleet also the whalebacks, can carry a great deal of their owners ore, but, outside of this, the lake trade and commercial interests generally, have become too diversified for any one or even half a dozen firms to corral it in its entirety, or even partially so, that is to any alarming extent. Even the power of the Lake Carriers' Association and the junction of all available interests could not hold itself together for thirty days in unanimity so as to drive transportation of cargoes into any one circle or combination. Crazy assertions and moods have been indulged in before, with as little harm to vessel owners as this one will have on the great and ever increasing carrying trade of the lakes.

It is reported that two Japanese cruisers are to be built in the United States. If this order is actually

secured it will go a long way in proving to other nations the skill and efficiency of American shipbuilders. Our own navy shows the ability of naval experts to construct whatever is called for and the cost is the only stickler. American labor is paid fair living wages while foreigners simply exist on their earnings, hence, the difference in the contract price for building first-class cruisers more than compensates for our superiority in turning out the metal and equipment required to complete such high-classed special tonnage. Ex-President Harrison is quoted as saying: "We now stand abreast of the great naval constructors of the world. Who says we shall not go beyond them?"

Civil service rules have been put into practical operation in the navy yards of the country and work is greatly facilitated thereby. Formerly politicians caught up all jobs in sight for their friends and the service was hampered accordingly. The Pacific Slope—or rather the Mare Island Navy Yard and the Union Iron Works have at present the busiest times. Nearly \$100,000 per month is being expended at the Mare Island Navy Yard, and the vessels being overhauled, rebuilt or repaired are the Baltimore, Charleston, Hartford, Concord, Mohican, Pensacola, Bangor and the Petrel. The eastern yards will shortly be busy on the general overhauling for winter cruising of the North Atlantic squadron.

Parting wheel-chains when in narrow waters, going through the rivers, etc., has become quite epidemic lately, two such cases being reported within the last few days, and this, too, on large valuable steam tonnage. If the wheel-chains or flexible steel wire wheel-ropes are going to give out at all, it is in close quarters, where they are given the most work to do, that such a break is liable to occur. The foregoing is to call attention to the necessity of a strict daily or regular inspection of the steering gear, where such is not now the custom. It of course goes without saying that on all first-class iron and steel tonnage such an inspection takes place at frequent intervals, and the result duly reported to the officer of the deck, but is it?

It is now positively reported that the lighthouse tender Dahlia did not remove the spars from the sunken schooner Col. Ellsworth, but only located the wreck in the Straits of Mackinac. It would be more astonishing news, however, if the naval officer in charge of the light-house tender, had undertaken to enter the lists of wreckers on the lakes, and removed the spars for what they were worth as salvage, although by doing so he would have made a hidden obstruction. Unlike some other departmental employees, the Dahlia's commanding officer has a better conception of his line of duty, and apparently performs it.

THE MARINE RECORD is not alone in getting in an occasional "straight out from the shoulder blow" at the steamboat inspection service as at present constituted as witness the following from the last issue of the New York American Shipbuilder: "There is another row in the local steamboat inspection office at this port. This time it is between inspector of hulls, Samuel G. Fairchild, and assistant inspector, Wm. A. Leonard. The latter in retaliation for being brought up before Supervising Inspector General Jas. A. Dumont, for calling his superior officer a liar and a thief, brings some damaging evidence against Mr. Fairchild. For full particulars read the New York Herald of Wednesday."

The Canadian engineer entrusted with the placing of two of the Pintsch system of gas-lighted buoys at Point Pelee, Lake Erie, permitted one of the buoys to get adrift, and it was cruising around the lake on its own account for a few days, until finally picked up at Rondeau. Now there is nothing very remarkable in the foregoing, but there was something rather glaring in the telegraph report sent to all lake papers, stating that the red gas buoy had been picked up and placed. The other buoy is painted black, but we would hardly like to call it a black gas buoy—perhaps it is a gas-black buoy.

A. J. Morse & Son, Congress street, Boston, Mass., is one of the most reliable and well-known firms engaged in the manufacture of diving apparatus and men are working under water, with Morse's suits and outfits, in all important wrecking operations.

THE SUMATRA'S VICTIMS.

The loss of Patrick Peterson, Peter Anderson, Arthur Bernsted, and Charles Henry, part crew of the barge Sumatra, has caused grief and excitement among their relatives and friends in West Bay City, Mich. Capt. Charles Johnson had telegraphed the relatives of the men who were lost. Patrick Peterson and Peter Anderson were brothers-in-law. Peterson was 28 years old and leaves two brothers and a sister. Peter Anderson was 31 years of age and leaves a widow and three year old son in Sweden and a sister in West Bay City. Charles Henry was 24 years of age, and leaves a mother, father, two brothers, and two sisters all in Norway. He lived with his uncle, Nels Henry. Arthur Burnsted was 35 years of age, and had no relatives in this country save a half sister.

THE SEPTEMBER HURRICANE.

The Weather Bureau, Department of Agriculture, Washington, D. C., has sent out storm bulletin No. 5, 1896, showing the path of the hurricane which swept over the lakes September 29 and 30th. The delineation of the 30th is especially worth the study of those engaged in the lake interests, as it shows clearly the low trough of barometer readings circling the locality, with the storm track traced from the Caribbean Sea northward, and uniting with a secondary storm which had formed during the 29th, in the Ohio Valley. It was central with diminished energy over the northern portion of Lake Huron, with a trough extending in a southerly direction towards the head of Lake Michigan. The action of the wind was cyclonic and of hurricane force at several points.

RAISING THE CAYUGA.

Reports from Cross Village, Mich., state that Captain James Reid, who is engaged in raising the sunken steamer Cayuga, has just resumed work at the wreck, his wrecking fleet having been sheltered at Harbor Springs for ten days. Heavy timbers have been placed across the decks of the large wrecking scow McDougall preparatory to making the first lift on the wreck. The Cayuga's water bottom has been filled with air and four steel pontoons have been placed ready for a lift. The McDougall will be anchored directly over the wreck and cables fastened to the timbers of the scow, before which the scow will be filled with water. When all is ready the pontoons will be filled for a final lift. After all is fast, the McDougall will be pumped out, and it is very probable that the Cayuga will see daylight again.

A FLAG INCIDENT.

Judge Hopkins, in the Superior Court, Lawrence, Mass., has quashed the somewhat famous green flag case against Patrick O'Brien. O'Brien was arrested July 6 for displaying an Irish flag on a portion of the staging of the new school house, Independence day. As there is a statute forbidding the display of any foreign flag upon a public building, O'Brien was found guilty, and Judge Stone of the police court fined him ten dollars. An appeal was taken to the Superior Court, and a decision was given. Judge Hopkins rules that Ireland was not a country in the meaning of the statute governing the case, which had no flag except that of the United Kingdom of Great Britain and Ireland. The case was accordingly dismissed.

ILLUSTRATED HISTORY OF THE LAKES.

The firm of J. H. Beers & Co., Lakeside Building, Chicago, are taking steps to publish an illustrated history of the Lakes. The work when completed will be contained in two large volumes, each 8½ by 11 inches. Compilers are now at work at each of the prominent lake ports gathering data for the publication.

J. R. Enghlon, a sailor on the steamer Leland, attacked the mate on the trip down Lake Erie, and cut him badly with a knife. He also made an attack upon the captain, but was put in irons. At Sandusky it was found that he was missing. It is thought by the master of the Leland that Enghlon had gone insane and must accordingly be taken care of.

During the recent gale two fishermen hailing from Southampton, Ont., were blown across Lake Huron. They were picked up on Friday morning off Point Au Sable by Capt. July of the steamer Nipigon and carried to the Sault. They had been three days without food and were nearly exhausted when picked up.

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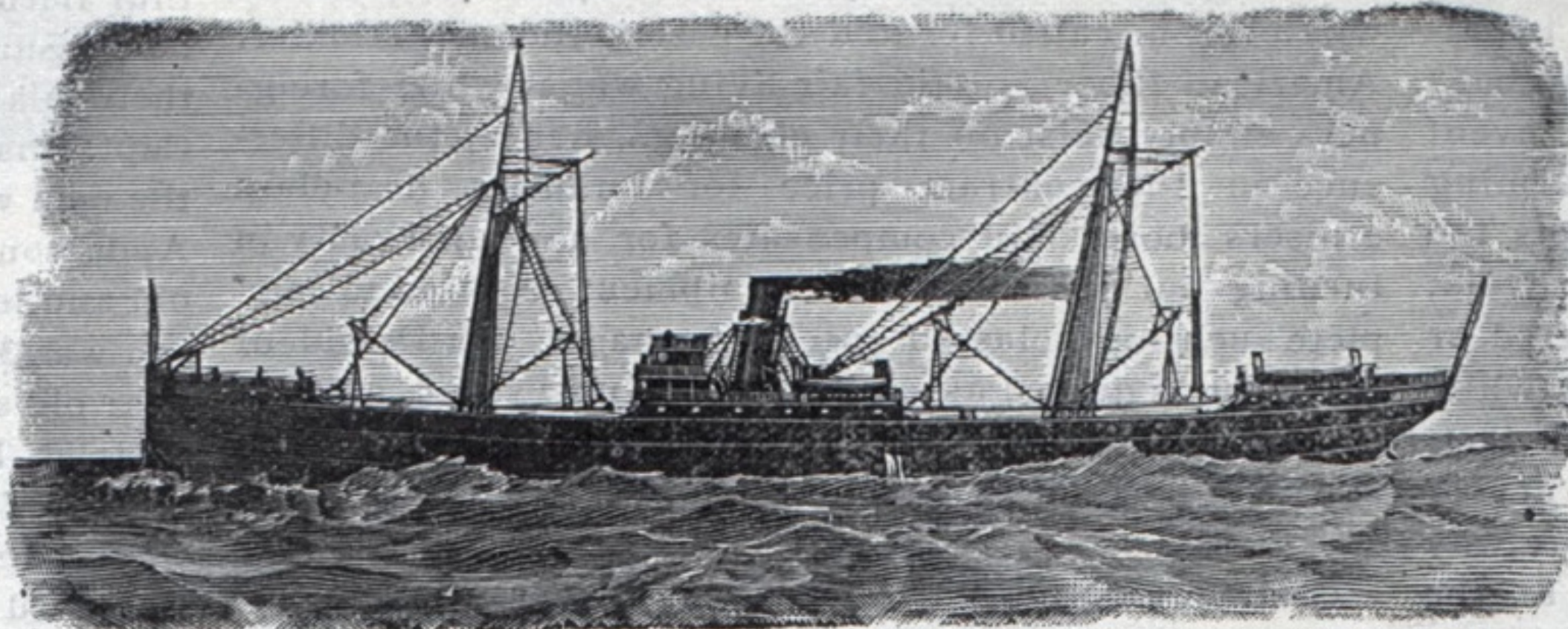
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MARITIME LAW.

As an indication of how close the lines are drawn between tonnage and salvage services we quote the following decision recently rendered in an English court:

The owners of the tug *Prairie Flower* sought to recover £300 (\$1,500) from the owners of the *Llandoff*, for salvage services. Defendants paid £20 (\$100) into court. The tug *Prairie Flower* was cruising between Lundy Island and Ilfracombe, and the master noticed that a steamer which he had sighted over an hour before was broken down. The tug bore down upon her and found that she was the *Llandoff*, her after engine having broken down early that morning. The tug stood by until the captain of the *Llandoff* made certain that he could not do anything with his engines, and hoisted three balls intimating that his vessel was not under control. Four hours later the *Prairie Flower* took the *Llandoff* in tow, and towed her into Cardiff Roadstead. It was contended that the vessel being helpless was liable to be wrecked either by being driven ashore on a headland or drifting into Bridgewater Bay, and that therefore the services rendered were salvage services. It was alleged in defense that the vessel was in no immediate danger, and that being a vessel of an old type she might have got in Cardiff under sail, or have been carried up by the tide in 48 hours, but that the captain, to expedite the arrival in Cardiff, engaged the tug. The services rendered were, it was urged, only towage services. His Honour held that the claim for salvage services has been made out, although it was only just over the line which divided towage from salvage. Judgment was therefore given for £75, (\$375) including the amount paid into court and costs.

In all cases of this sort occurring on the lakes, towage services only are claimed; salvage not being even thought of as it simply amounts to an ordinary breakdown.

In the case of William K. Vanderbilt's yacht *Alva*, sunk in a fog by a large cargo steamer while at anchor, Judge Putnam of the United States Circuit Court of Appeals, for the First Circuit, ruled the cargo steamer in fault, according to the following digest of the case.

1. A large freight steamship, the *H. F. Dimock*, navigating Pollock Rip Slue during a dense fog at an admitted speed of $4\frac{1}{2}$ or 5 knots through the water and 7 or 8 knots by the land, which ran into and sank a yacht at anchor held, at fault for improper speed. As the *Dimock* met the fog before reaching the Slue, and could have anchored before entering that thoroughfare, no special circumstances excuse the steamship when in the Slue, and the law required her to be so navigated that she could avoid any steam or sailing vessels that might be met on the passage through the Slue.

2. That the master on the *Dimock* exercised an honest judgment in the navigation of the Slue, held no ex-

cuse for the violation of a positive rule of the statute.

3. The damages for the loss of a large sea pleasure yacht are not merely the market value, as it is not of the class of articles which are sold from day to day so that current transactions would enable the owner if he desires to sell, to obtain within a reasonable time a fair value. Such a vessel is like dwellings of more than moderate cost erected away from cities. In such cases the court should call to its aid all circumstances, such as the original cost, its condition at time of loss, the sum for which the owner could replace it and the depreciation by marine architecture.

4. The yacht *Alva* built by days labor at a cost of between \$380,000 and \$400,000 and kept in thorough repair for five years, having been valued by the Commissioner and District Court at time of collision at \$190,000, held that this valuation had properly taken into account all these considerations and that amount was therefore affirmed.

5. Inasmuch as value of the yacht, as thus established, was more than double the limitation value of the steamship, held, unnecessary to consider any alleged faults on the part of the yacht.

6. In proceedings for limitation of liability the shipowner must bear the taxable costs of appraisal of the vessel, the giving of a stipulation therefor, and in general the expenses of obtaining a proper status in court so that the fund can be distributed. The costs of administration and distribution of the fund are generally to be paid from the fund itself, except that the cost of any contested issue is to fall on the party losing the same, as the costs of any litigation, entirely independent.

7. Where the stipulation for the limitation value is given by the owner, he is not generally in default, in withholding the amount until the entry of the final decree. Hence, the owner is not liable for interest prior to entry of the decree. Interest however ordered upon the limited value of \$92,000 from the date of the District Court decree, August 3, 1895, until payment shall be made.

Two interesting points in Admiralty and Maritime jurisdiction have been referred to the Supreme Court of the United States by the Court of the southern district of New York, the question having arisen in the matter of the prosecution of Henry Hewedson for alleged murder on board an American ship at Havana. They are:

- (1) Where an assault is committed on the high sea and the victim dies four days later on land, does the crime come within the Admiralty and Maritime jurisdiction?
- (2) Where a crime other than murder is committed on the high sea, and the guilty person is arrested and indicted at the first port of the United States he enters, the date being more than three years after the act was committed, is the prosecution barred by the Statute of Limitations?

THE ROSALIE.

District Court, N. D. California. September 17, 1895.

MARITIME LIENS—MATERIAL FURNISHED IN HOME PORT—OWNERS PRO HAC VICE.—Where materials were furnished for the use of a vessel, upon the order of a company which had possession of her under a contract of purchase, and which was, therefore, the owner pro hac vice, in the port where such company had its principal place of business, by material men who either knew the company's relation to the vessel, or were in possession of the avenues of information, and of facts sufficient to put them on inquiry, held that credit must be considered to have been given to the company, and that, consequently, no lien was created. *The Alvira*, Fed. 144, distinguished.

SAME.—The mere fact that persons furnishing materials in the home port, on the order of the owner pro hac vice, "suppose" that the vessel is good for the purchase price, is not of itself sufficient to create a lien.

TRIAL OF AN OLD COLLISION CASE.

The *Passaic* case on the Admiralty docket of the United States District Court, Northern District, Utica, N. Y., was opened for trial before Judge Cox, on Tuesday.—H. D. Goulder, of Cleveland, and P. H. Philips, of Port Huron, for libelants, and J. C. Shaw, of Detroit, with Benjamin Williams, of Buffalo, for the respondents.

The facts of the case are as follows: During the season of 1890 the schooner *Tremble* was sunk in St. Clair River near the rapids, and Thos. A. Murphy, a wrecking firm, of Detroit, bought the hull as it then lay, sunk about 300 feet from the Canadian shore. Mr. Murphy was at work raising the *Tremble*, when on the night of November 8, the *Passaic*, with three barges in tow, passed down the river, the last barge in tow colliding with the wrecking schooner *Ben Hur*, and she sunk resting on the schooner *Tremble*. Action is now brought by the Murphy Wrecking Co. for the value of the *Ben Hur*, *Tremble*, and the wrecking outfit, in a sum of \$35,000.

The shoal off the foot of Wayne Street, Detroit River, found by the Western Transit liner *Hudson*, is now buoyed. Instead of four fathoms as shown on the chart there is only seventeen feet there.

A SAILOR'S BURIAL.

It has remained for an eminent "sky pilot" to take the wind out of the old sailor's last wish, who gloried in having a cemetery where he could roll around, supposing that the doctrine should prove true, that the soul entered one of the animal crew. He did not care to go to a beast of the land, but wanted a dwelling far more grand, etc. In carrying out this proper sentiment, the parson, as he is prone to do, laid the old sailor out flat and beat him even in the last round, for no tar boiler ever had the honor of fixing his departure in so shipshape a manner as was carried out at Galveston recently. In this case a tug-boat was duly chartered for the funeral at sea of a learned man who wished his body to be so disposed. He was the Rev. James de Buchanane, Ph.D., M.D., who said his happiest years had been spent on the ocean, and he wanted a sailor's burial. His body was accordingly taken well beyond the three-mile limit, and sewed up in a hammock, with weight at the feet, he was regularly committed to the deep.

AN OFFICIAL INQUIRY.

Lieutenant J. E. Reinberg, the assistant inspector of the Eleventh life-saving district, is conducting an official investigation of the work of the crew at Milwaukee, in connection with the wreck of the Sumatra, early last Wednesday morning. This investigation is not being made in response to charges or complaints, but in accordance with a rule of the service, which requires a thorough investigation of all cases where loss of life occurs in a wreck. Comments have been made, however, on the assumption that the crew were too slow in getting to the scene of the wreck.

ANNUAL MEETING OF NAVAL ARCHITECTS.

The Society of Naval Architects and Marine Engineers will hold its annual meeting in the auditorium of the American Society of Mechanical Engineers, No. 12 West

31st street, this city, on Thursday and Friday, November 12 and 13. On Friday, November 13th, a banquet will take place of which subsequent notice will be given and to which members of the association and their guests are invited.

Members intending to propose candidates for membership are requested to notify the secretary, in order that the necessary blank forms of application may be forwarded and properly filled out. Papers to be read at this meeting should be forwarded to the secretary as soon as possible. The usual notice giving assignment of papers will be issued about November 1.

Clement A. Griscom, Sr., is the president of this society and Naval Constructor F. T. Bowles, U. S. N., of the Brooklyn Navy Yard, is the secretary. Anyone desiring further information in regard to the coming meeting can communicate with Secretary Bowles.

REFERRED TO CAPT. EVANS.

U. S. Ship Indiana, Sept. 22th. edditer army and Navy Jurnel deer sir i wanter tel you that wen we men on this ship gav 3 cheres for the men wot giv the selver wich the skiper hollerd for i did not chere mutch we men dont get no silver but scous pans and pint pots it dont do us no good to no the wardroom has that brite work and it only maks them mor uppy than they is god nose. wy they ant got nuthing subtle to ete offer it and wot they has ant no more fillin offer silver aperns with candle berry. stuk rownd than offer there busted crokry. it just gives them sik panes, to luk at it they dont want no julry but food in there stommix, and if the state of indiana had tuk that mony and pade off sum of the ded hors on pays books i gess thade hav cherd so dam lowd al alone they wodnt hav wanted us to do it for them. Yours truly, T Ap Catesby Shelbak. port wach after gard sweeper.

Beeson's Marine Directory is larger and more complete than ever. Mr. Beeson has done his work well and

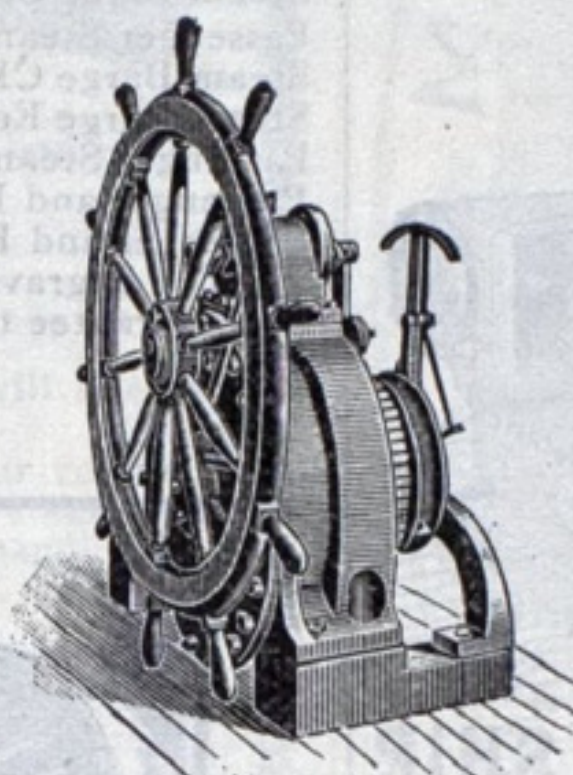
we recommend his Marine Directory to our readers.—The American Ship Builder, New York. For sale at Marine Record office, Western Reserve Building, Five Dollars.

PROPOSALS.

U. S. ENGINEER OFFICE, Duluth, Minn., Sept. 20, 1896. Sealed proposals for rip rap embankment at Agate Bay (Two Harbors), Minn., will be received until noon, Oct. 20, 1896, and then publicly opened. Information given on application. CLINTON B. SEARS, Maj. Engrs. 39-42

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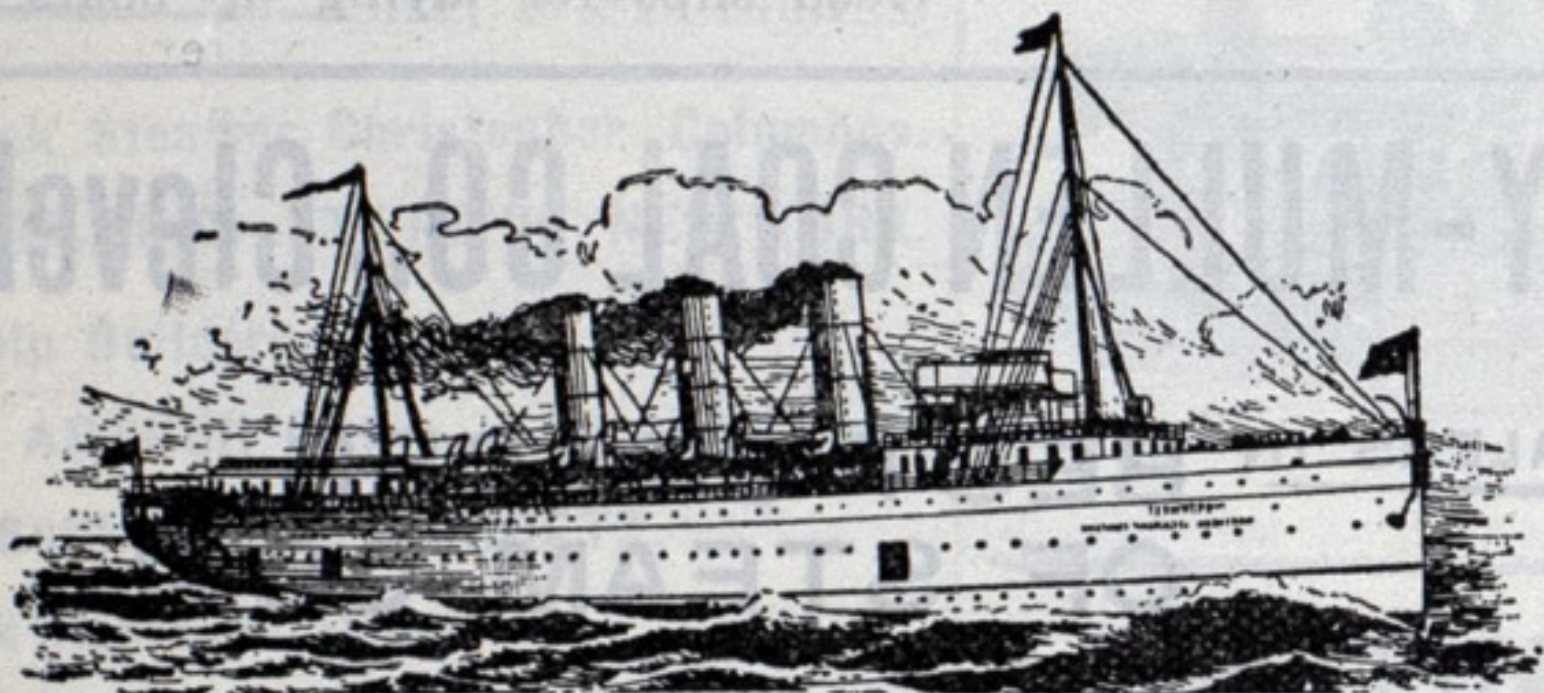
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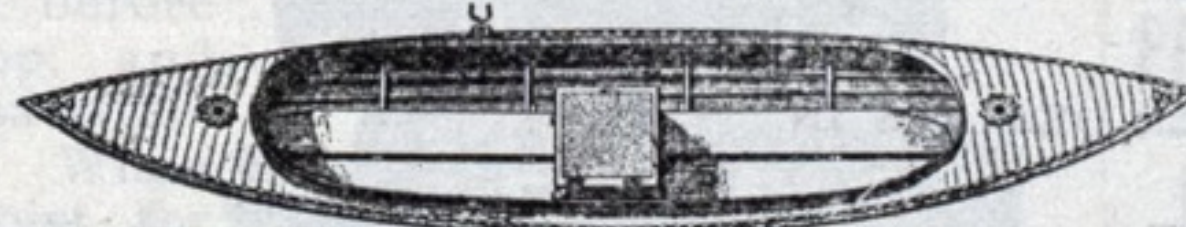
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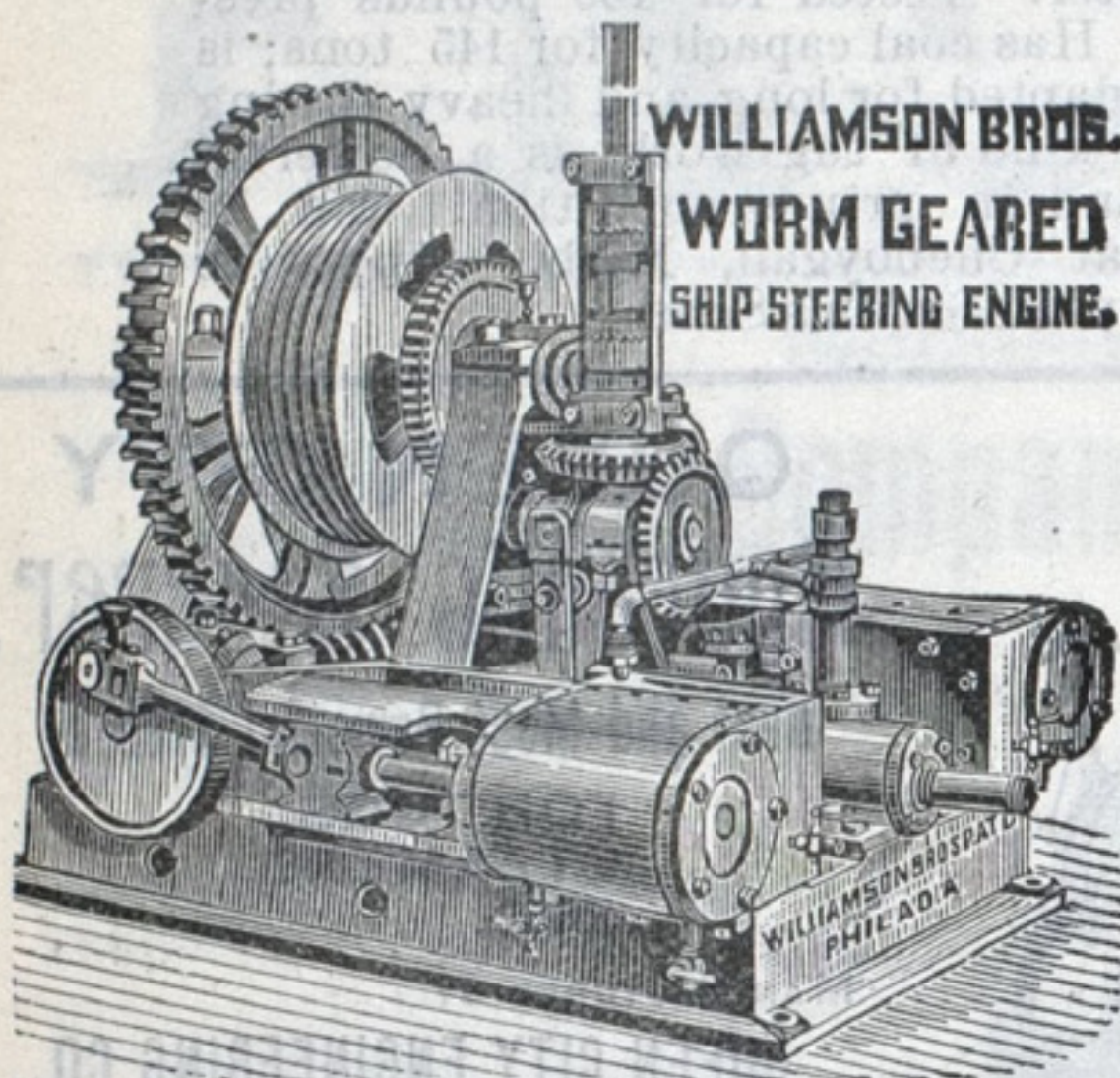
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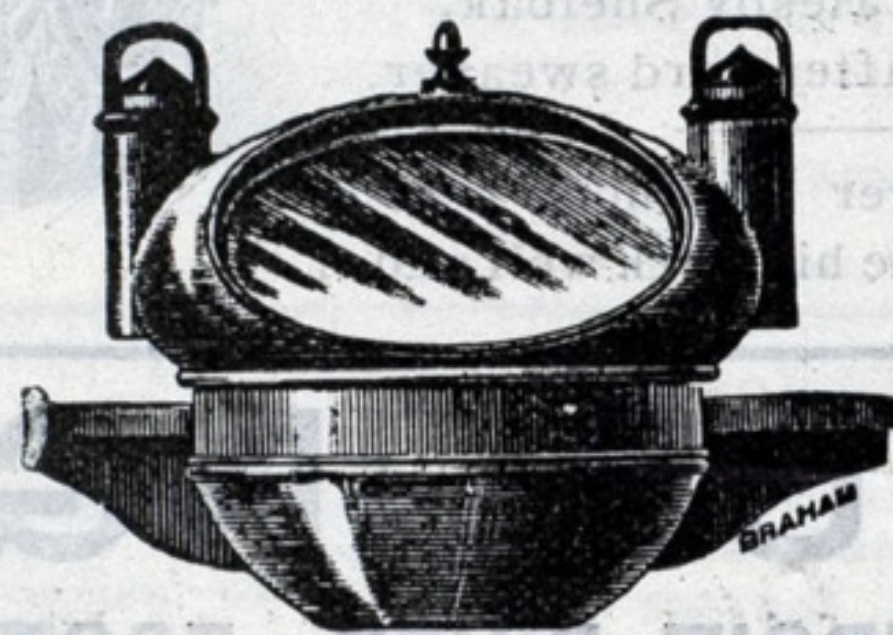
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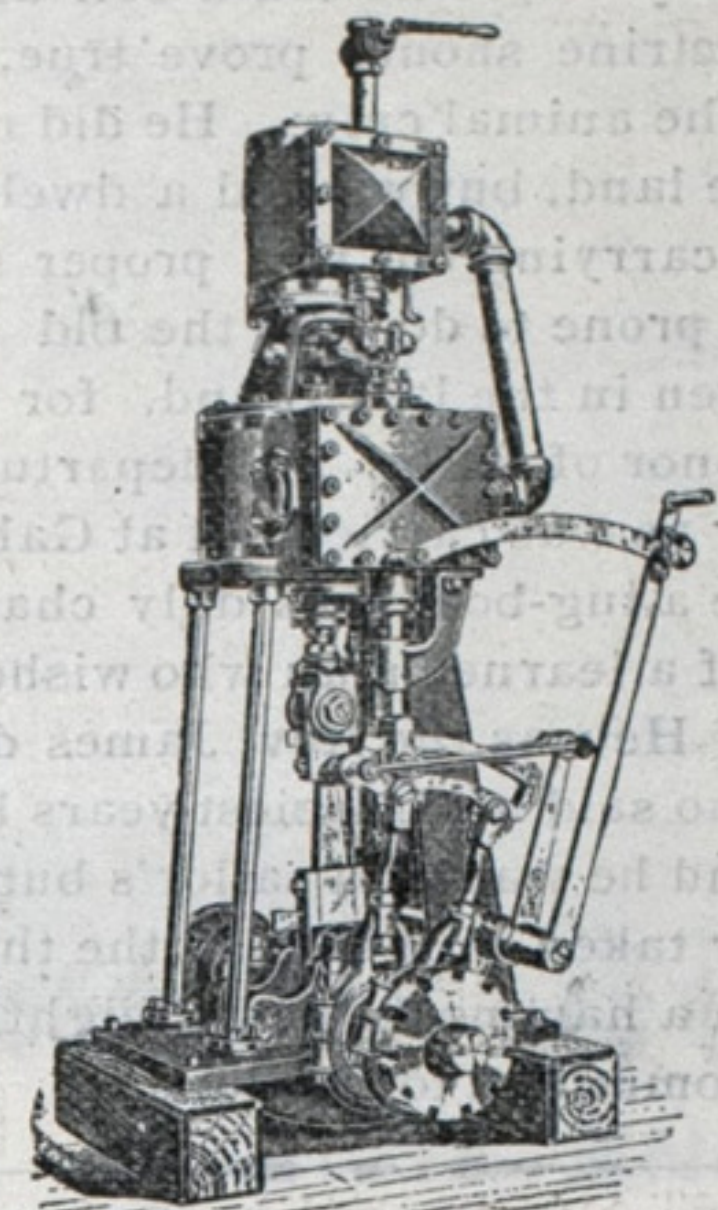
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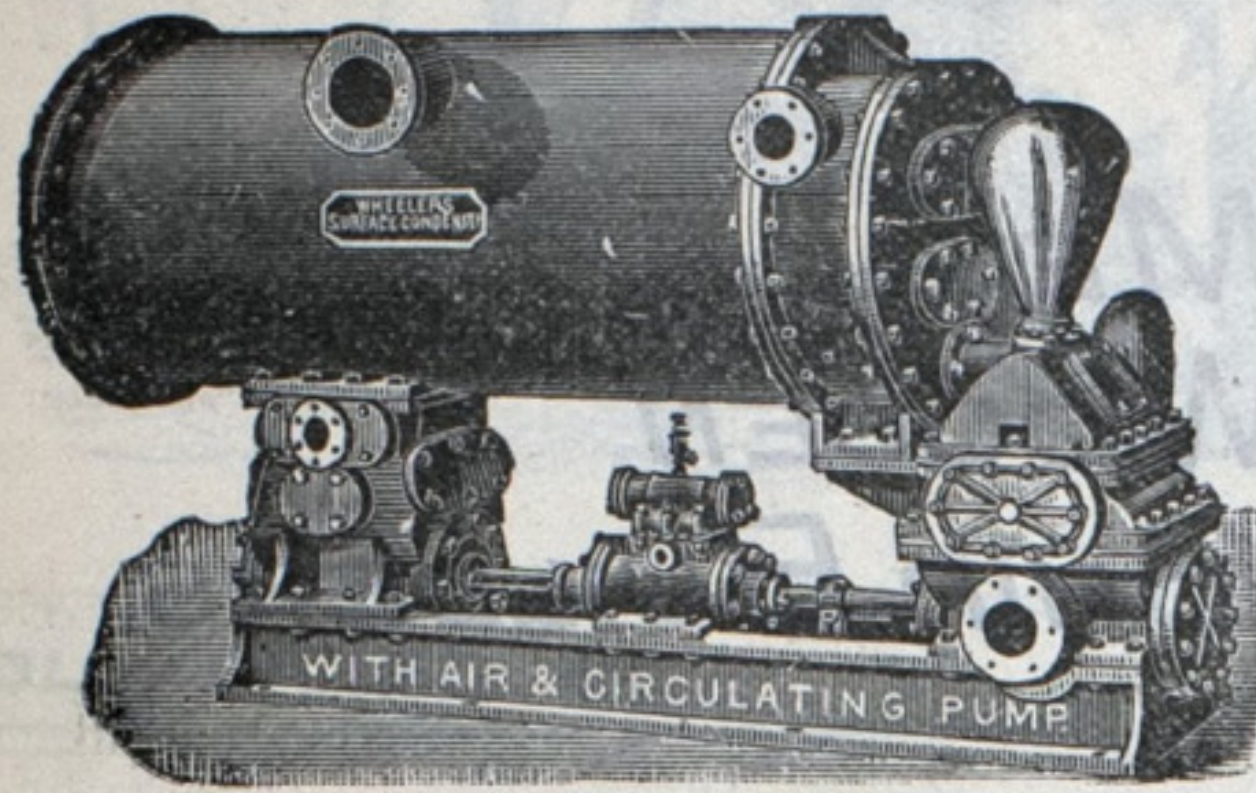
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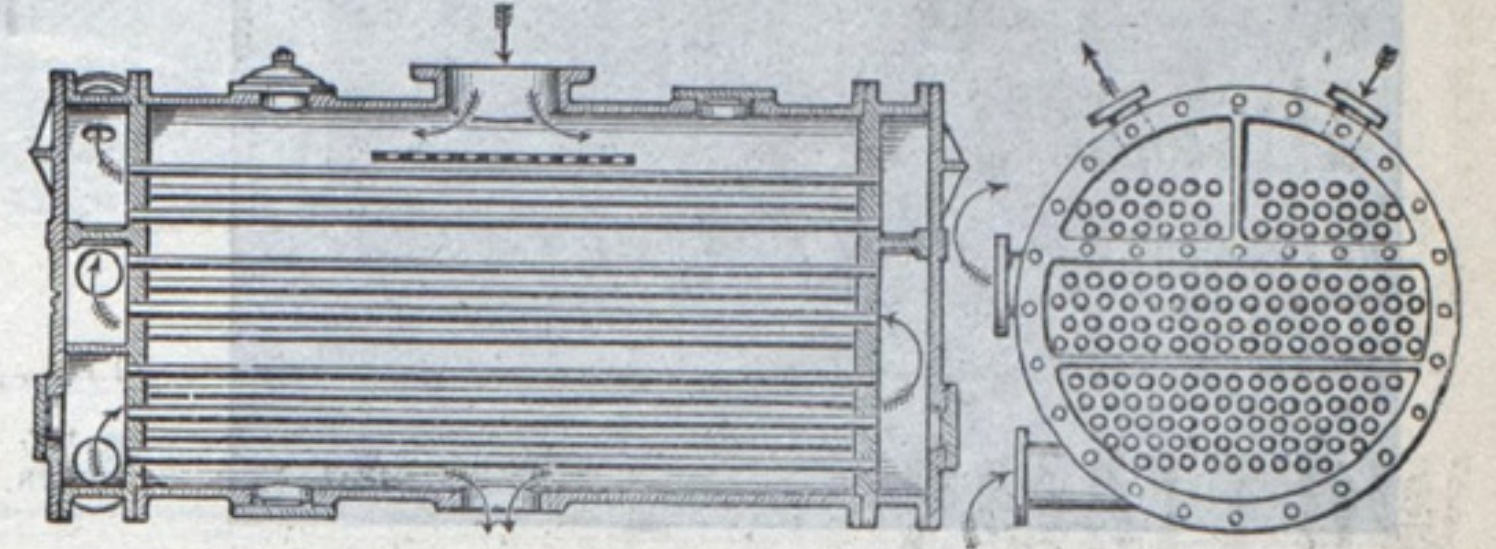
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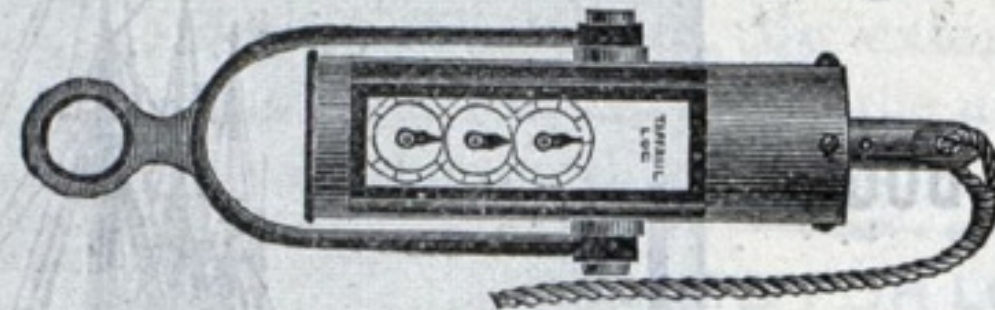
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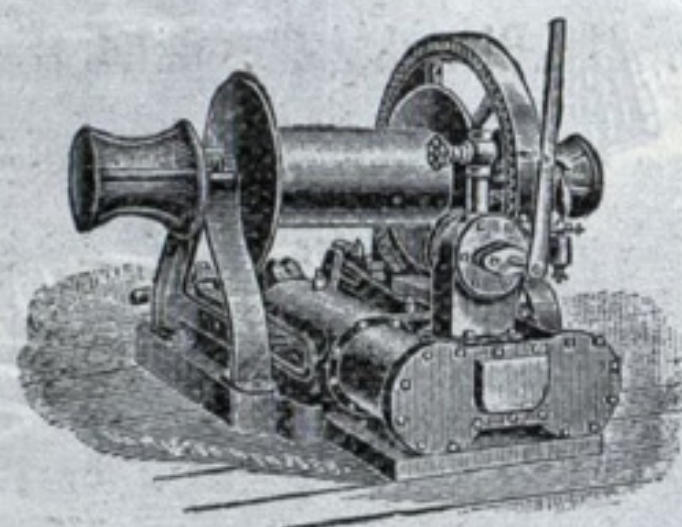


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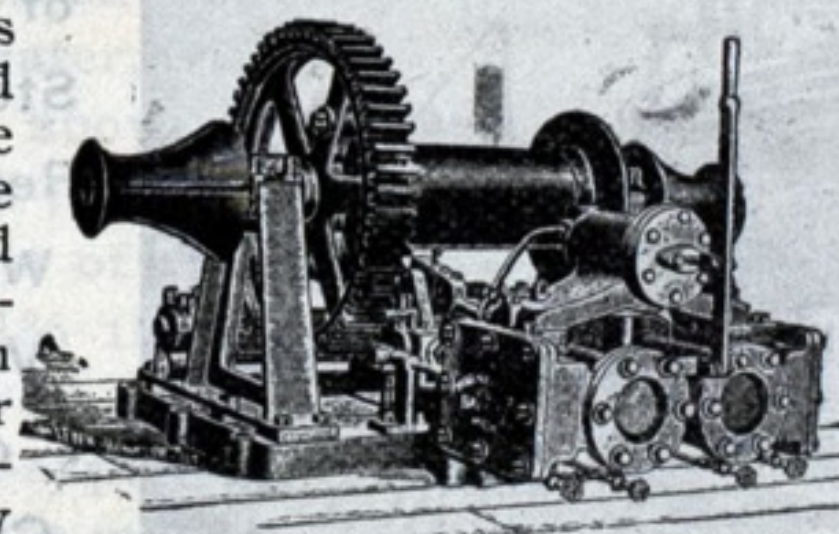
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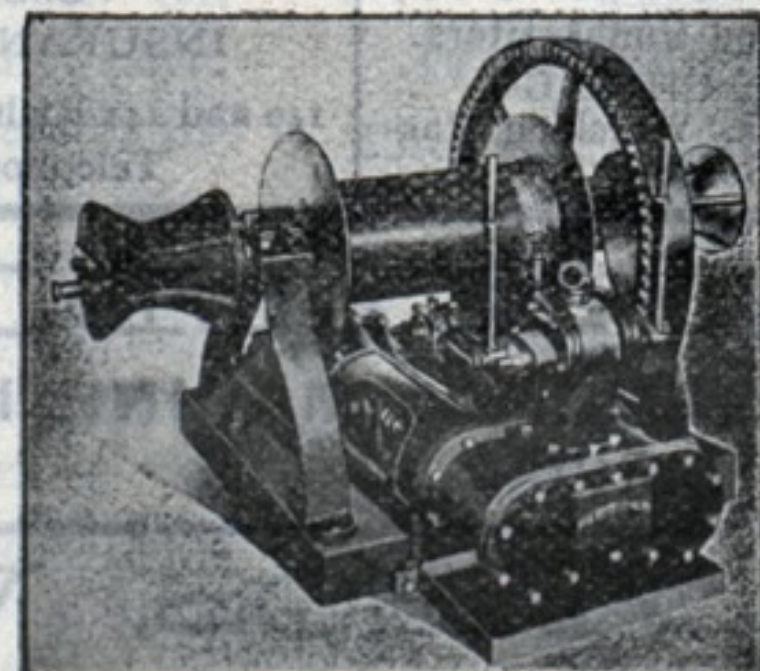


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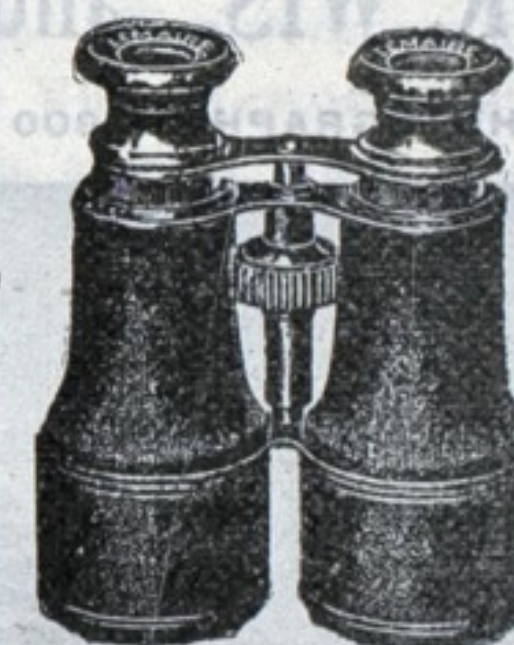
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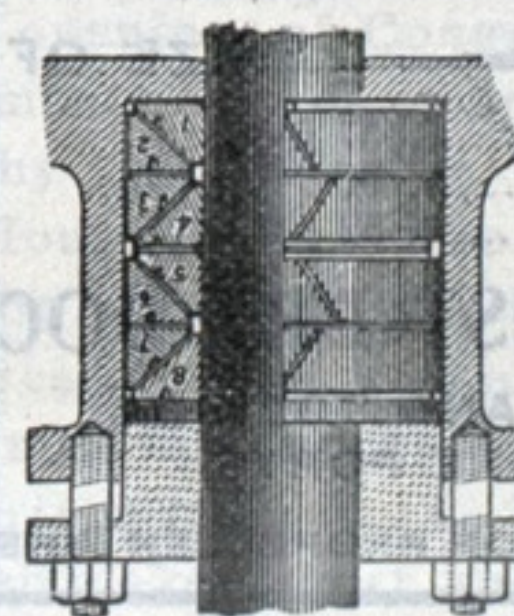
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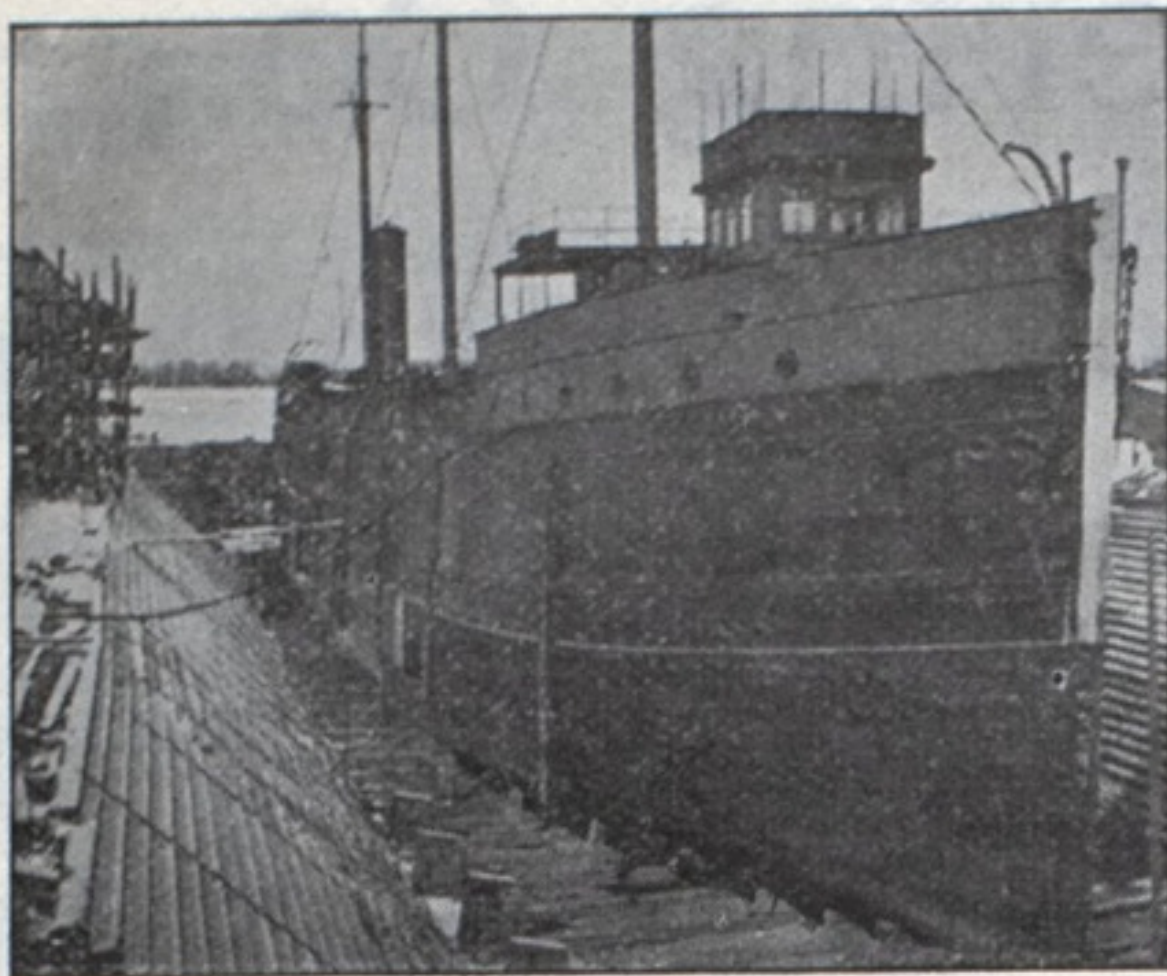
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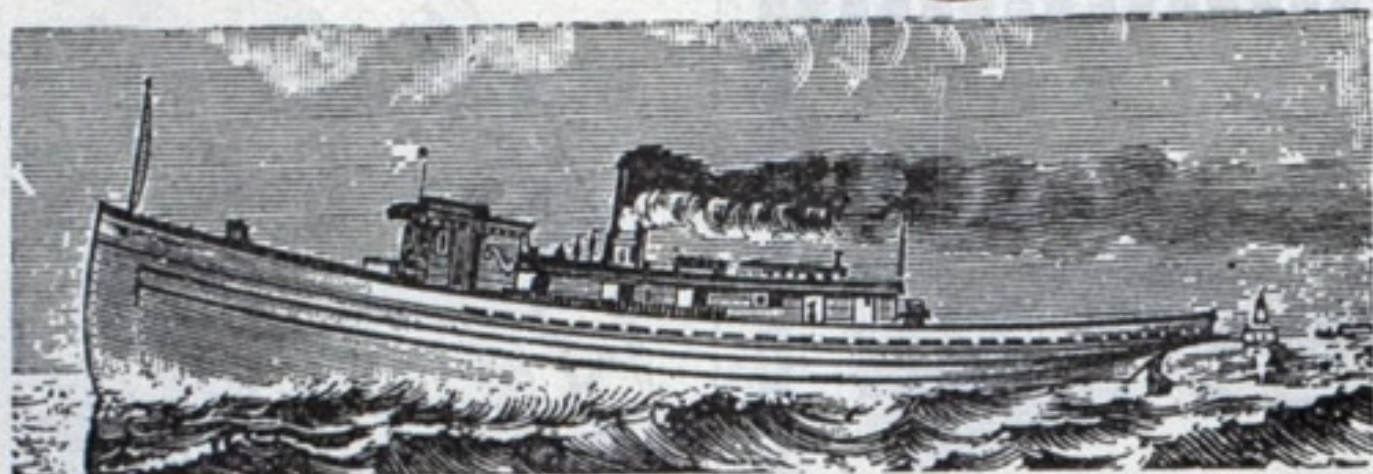
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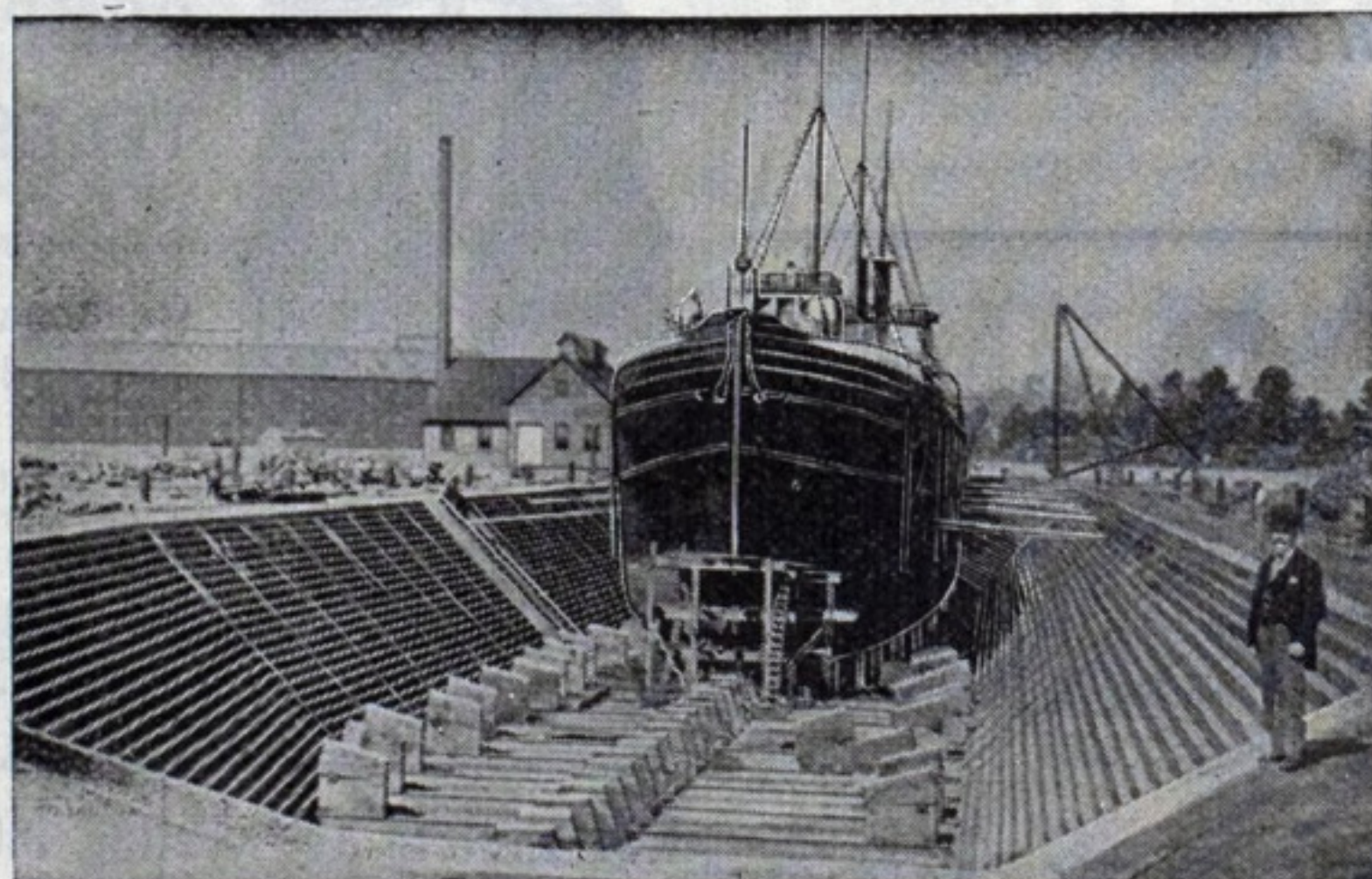
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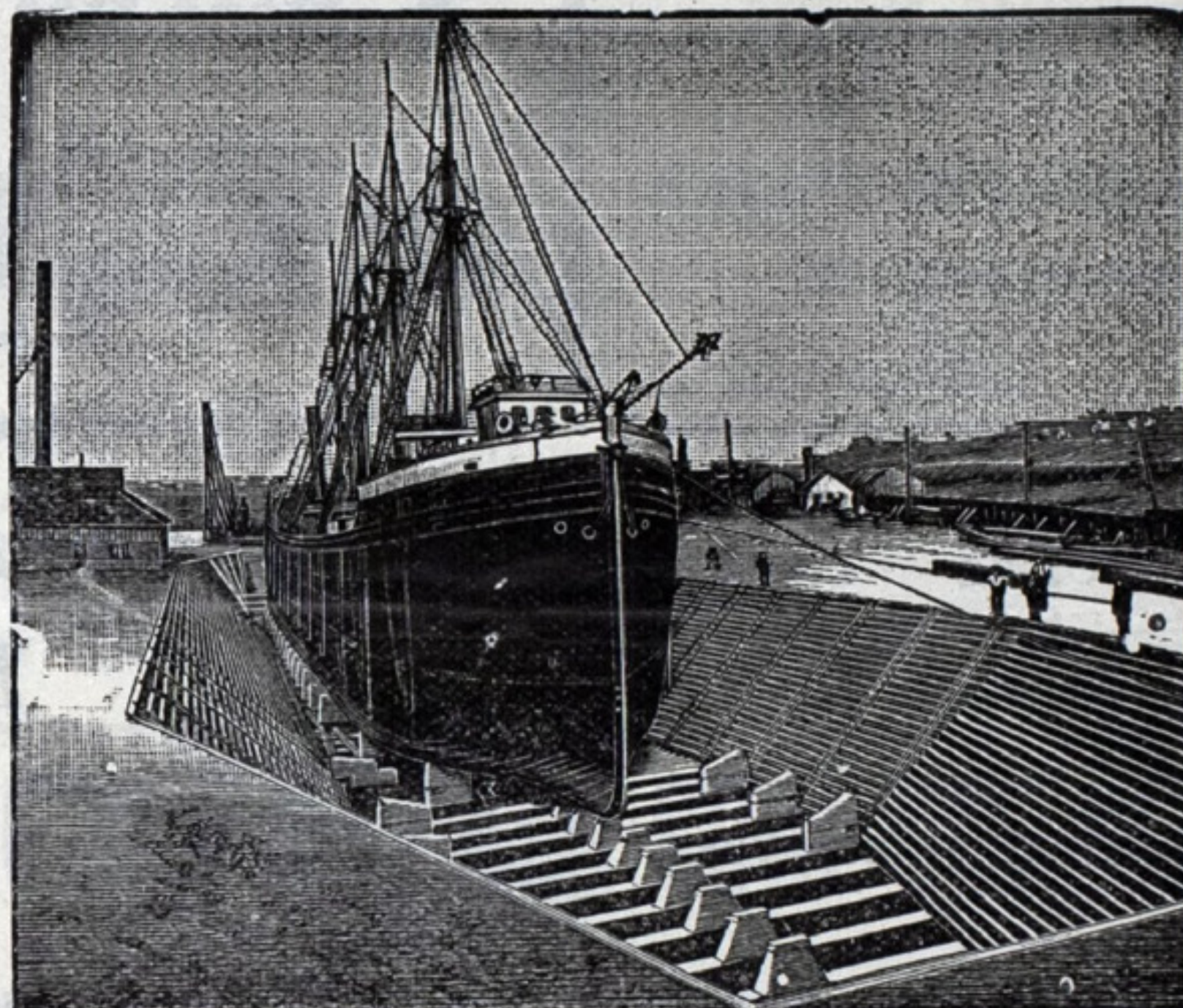
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